

# Copyright Law and the Internet

**In Modern  
South African Law**

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## Declaration

*"I, the undersigned, hereby declare that the work contained in this thesis is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree*

## **Summary**

The Internet is coming more and more into focus of national and international legislation. Especially with regard to copyright law, the rapid growth of the Internet, its global character, its novel technical applications and its private and commercial use by millions of people makes the control over a work complicated and raises copyright problems all over the world. Present legislation is therefore challenged to avoid gaps in the law. Considering the rapid growth of online providers and users in South Africa, it is likely that copyright disputes with regard to the Internet will evolve here soon. In this dissertation, the "world" of the Internet and its lawfulness with regard to existing South African copyright law will be examined. The examination tries to establish whether South African copyright law is able to cope with the present Internet problems and whether it leads to reasonable results.

The first chapter of this dissertation will give an overview of the basic principles of the Internet, including the history, development and function of the Internet. Furthermore the changing aspects by means of digital technology will be discussed.

Because the global character of the Internet lead to "international" infringements, governments are considering the prospect of reaching international accord on the protection of intellectual property in the digital era. In chapter two, the present international harmonisation of copyright law will be introduced. Especially the quick adoption of the World Intellectual Property Organisation Treaties in December 1996 demonstrated that an international realisation for a call for action is existing.

In chapter three, the application of South African copyright law with regard to the Internet will be discussed. First, it will be examined if a digital work on the Internet is protected in the same way as a "traditional" work. Second, the

various rights of the copyright holder are discussed in connection with the use of a work on the Internet. Third, the potential application of the exclusive rights of the copyright holder to various actions on the Internet, such as caching, Web linking and operating an online service will be discussed.

The Internet is a worldwide entity, and, as such, copyright infringement on this system is an international problem. The scenario of global, simultaneous exploitation of works on the Internet conflicts sharply with the current system of international copyright protection, which is firmly based on national copyright laws with territorial effects. Section four provides therefore an overview of the applicable law on an international net and analyses the necessity and borders of protection.

## **Opsomming**<sup>1</sup>

Nasionale en internasionale wetgewing fokus in 'n toenemende mate op die Internet. Die versnelde groei van die Internet, sy wêreldkarakter, sy nuwe tegnologiese toepassings en sy private en kommersiële gebruik deur miljoene mense maak beheer oor 'n werk baie gekompliseerd en skep veral outeursregprobleme regoor die wêreld. Wetgewing soos dit tans is, word dus uitgedaag om die leemtes in die reg te ondervang. Gegewe die vinnige groei van gekoppelde verskaffers en gebruikers in Suid-Afrika, is dit waarskynlik dat outeursreggeskille met betrekking tot die Internet binnekort ook hier gaan ontwikkel. In hierdie verhandeling gaan die "wêreld" van die Internet en sy wettigheid onder bestaande Suid-Afrikaanse outeursregwetgewing ondersoek word. In die ondersoek word gepoog om vas te stel of Suid-Afrikaanse outeursregwetgewing geskik is om die Internetprobleme wat tans bestaan te hanteer en of dit lei tot aanvaarbare resultate.

Die eerste hoofstuk van die verhandeling sal 'n oorsig gee van die basiese beginsels van die Internet, insluitende die geskiedenis, ontwikkeling en funksie van die Internet. Verder sal die veranderende aspekte as gevolg van digitale tegnologie bespreek word.

Die wêreldkarakter van die Internet gee aanleiding tot "internasionale" inbreukmakings en om hierdie rede oorweeg regerings die moontlikheid van internasionale ooreenkomste oor die beskerming van intellektuele eiendom in die digitale era. In hoofstuk twee word die bestaande internasionale harmonisering van outeursreg bespreek. Veral die vinnige aanname van die World Intellectual Property Organisation se verdrae in Desember 1996, illustreer dat daar 'n internasionale bewustheid is dat iets in die verband gedoen moet word.

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<sup>1</sup> Afrikaanse vertalings van internetterme verkry vanaf <http://www.afrikaans.com/rekenaartermes.html>.

In die derde hoofstuk word die aanwending van die Suid-Afrikaanse outeursreg met betrekking tot die Internet bespreek. Eerstens word ondersoek of a digitale werk op die Internet op dieselfde wyse as 'n "tradisionele" werk beskerm kan word. Tweedens word die verskillende regte van die outeursreghebbende in verband met die gebruik van 'n werk op die Internet, bespreek. Derdens word die potensiële aanwending van die eksklusiewe regte van die outeursreghebbende op verskillende aksies op die Internet, soos byvoorbeeld kasberging, web koppeling en die werking van 'n gekoppelde diens, bespreek.

Die Internet is 'n wêreldwye verskynsel en sodanig is outeursreginbreukmaking op hierdie stelsel 'n internasionale probleem. Die scenario van 'n wêreldwye, gelyktydige uitbuiting van werke op die Internet is in skerp konflik met die huidige stelsel van internasionale outeursregbeskerming wat stewig gegrond is op nasionale wetgewing met territoriale werking. Hoofstuk vier bied daarom 'n oorsig oor die toepaslike reg op 'n internasionale netwerk en analiseer die noodigheid en ook grense van beskerming.

To my parents

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## **Chapter 1**

### **1 Introduction**

The Internet is perhaps the single most powerful medium for both legally and illegally transferring information and is coming more and more into focus of national and international legislation. Internet Law does not represent a new field or body of law such as tort law, contract law or property law. Internet Law is more or less the application of existing legal doctrines to the new technologies, avenues of commerce, and means of human interaction defined, created and experienced on the Internet.

The new technology of digitisation in our present "Information Age" has upset the balance created and maintained by copyright law between the rights of authors and users of the work. In general, the copyright owner has a justified interest to keep the control over and participation in the exploitation of his or her work(s) and achievement(s). Therefore Copyright law gives the copyright owner the exclusive right to utilise and exploit the product of his or her intellectual labour. At the site of the rapid growth of the Internet, its global character, its novel technical applications and its private and commercial use by millions of people, however, makes the control over a work complicated and raises copyright problems. Present legislation is challenged to avoid gaps in the law.

Look back on the past, things appear simple. Beginning with the invention of the printing press by William Caxton and movable types by Johannes Gutenberg which enabled multiple copies to be made,<sup>1</sup> the Parliament of England passed the first Copyright Act in 1710, the Statute of Anne, 8 Anne, c. 19: The author of a document received the exclusive right to print a book.<sup>2</sup>

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<sup>1</sup> Birrell, *The Law and History of Copyright*, p. 41.

<sup>2</sup> Birrell, *The Law and History of Copyright*, p. 92 and 93. Since the 15th century there was only a royal decree existing, requiring individuals to obtain a licence and official censor approval before

In the course of time, however, copyright law continually had to react to technical developments, for example the development of the gramophone, the broadcasting, the photocopier and the video recorder which have been the object of detailed legal scrutiny.<sup>3</sup> At the present time it is the Internet.

Although that it is often postulated that copyright law has fallen hopelessly behind the explosive developments in technology and will therefore soon become obsolete as a regulatory instrument in the digital world, the past has proved that copyright law is flexible and open to reform in the face of technological advances. Gaps in the law have not only been avoided or removed by a law which came into force, likewise the interpretation *de lege lata* lead to the result that copyright was flexible enough for its application with regard to novel inventions. Consequently, it is not necessary to develop a completely new model in order to categorise the products in a digital context. Copyright law will remain an essential instrument of cultural and economic control in the digital world.

Because the problems related to copyright infringement on the Internet are relatively new, South African courts and its legislature have not yet reacted to these developments. Thus, there are no particular laws or precedents in South Africa to rely upon. At certain stages of examination it is therefore interesting to compare the legal evolution in foreign countries that have already had the opportunity to deal with some issues. Among these are the United States, as being the country with the most comprehensive case law on Internet related disputes, and Europe, especially United Kingdom.<sup>4</sup>

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publishing. The Crown feared advancement of radical religious and political philosophies. See also Birrell, *The Law and History of Copyright*, p. 57.

<sup>3</sup> Dreier, *Copyright Law and Digital Exploitation of Works*, p. 7.

<sup>4</sup> Especially the development in Great Britain is of interest for South African law. The beginning of modern copyright in South Africa began with the Patents, Trade Marks, Design and Copyright Act, No. 9 of 1916. Section 143 of the Act declared the British Copyright Act to be in force in South Africa. The Copyright Act No. 63 of 1965 repealed the Act of 1916. This Act was very closely based on the British Copyright Act of 1956, but did not declare it to be in force in South Africa. The Copyright Act, No. 98 of 1978, which came into force on 1 January 1979, repealed the Act of 1965. The Act of 1978 still shows a degree similarity to the British Copyright Act of 1956, but it also based upon the provisions of the Berne Convention, as modified in Paris in 1975 (see Copeling, *Copyright*, p. 1).

Additionally, this thesis gives insight into international copyright law, such as the new World Intellectual Property Organisation (WIPO) treaties.

Considering the rapid growth of online providers and users in South Africa, it is likely that similar disputes will evolve here soon. In this dissertation, the "world" of the Internet and its lawfulness with regard to existing South African copyright law will be examined. The examination tries to establish whether South African copyright law is able to cope with the present Internet problems and whether it leads to reasonable results.

## **Chapter 2**

### **2 Basic principles of the Internet**

A juridical reflection and a description of the individual problems on the Internet are only realisable with a profound knowledge of the Internet and its applications. What follows should therefore give an overview of what is meant by the term "Internet", i.e. its history, development and basic functions.

#### **2.1 The History and Development of the Internet**

The amount of the *daily* transmitted data on the Internet is said to be higher than the complete knowledge of the world population in the 19th century.

The Internet originally can be traced to a defence-related academic research initiative of the U.S. Department of Defence.<sup>5</sup> Besides defence related research, due to the case of war, there was the need for an essential system that guaranteed the functioning of military communication. In the event of an atomic or otherwise attack, a hierarchy system based on one central point was too "vulnerable". The solution was a decentralised net of computers, with an automatic ability to re-route communication, which provides multiple routes of transmission. Thus, if a communication line was damaged or otherwise unavailable, the data could switch on a alternative route to finally reach the recipient.

Beginning in 1965, Larry G. Roberts (MIT Laboratory for Computer Science) connected the TX-2 computer in Massachusetts to the Q-32 in California.<sup>6</sup> This had a low speed dial-up telephone line and created the first wide-area

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<sup>5</sup> Van der Merwe, *Copyright and Computers*, p. 183; Bond, *Linking and Framing on the Internet: Liability under Trademark and Copyright Law*, p. 193.

<sup>6</sup> Leiner, *History of the Internet*, p. 2; Zakon, *Internet Timeline*, p. 44.

computer network ever built. In late 1966 Roberts went to the U.S. Defence Advanced Research Project Agency (DARPA) to develop a computer network concept and put together his plan for a net. Then in September 1969, four host computers<sup>7</sup> were connected up into the initial ArpaNET. The first international connections to the ArpaNET reached the University College of London (England) and the Royal Radar Establishment (Norway) in 1973.<sup>8</sup>

At the same time that ArpaNET was maturing, similar networks developed to link universities, research facilities, businesses and individuals around the world. These networks included, for example, BitNET, CSNET, FidoNET and UseNET.<sup>9</sup> In 1984, the U.S. National Science Foundation took over development of the Internet and assumed the task of its global expansion and the ArpaNET was connected to these different networks.<sup>10</sup> This connection of different networks allowed users of any computers with access to any one of the networks to transmit communications to users of computers of other networks. This series of linked networks finally became, what is today commonly known as the Internet, the "network of networks".

Thus, by 1985, the Internet was already well established as a technology, supporting a broad community of researchers and developers. They took advantage of the network by exchanging know-how over the Internet. Up until the end of the 1980s, the Internet was not particularly user friendly and special knowledge was required for accessing the networks. For this reason, in 1989 Tim Berners-Lee working at the European Particle Physics Laboratory (CERN) developed a co-operative project<sup>11</sup> in Geneva/Switzerland. The problem was how to manage and share the mass of information, which had been made available to those collaborators situated throughout the 19 countries that are members of the CERN. The first result of the CERN project

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<sup>7</sup> Provided at the UCLA (University of Los Angeles in California), Stanford Research Institute (SRI), UC Santa Barbara and University of Utah.

<sup>8</sup> Zakon, *Internet Timetable*, p. 5.

<sup>9</sup> Bond, *Linking and Framing on the Internet: Liability under Trademark and Copyright Law*, p. 193.

<sup>10</sup> Leiner, *History of the Internet*, p. 3; Cerf, *History of the Internet*, p. 1; Bond, *Linking and Framing on the Internet: Liability under Trademark and Copyright Law*, p. 193.

<sup>11</sup> The Web site of the CERN is available at <http://www.w3.org> (visited October 1998).

was the development of the hyperlink by which one can instantaneously move from one location in the Internet to another.<sup>12</sup> Shortly thereafter, a graphical user interface (GUI)<sup>13</sup> was developed which enabled users to point and click with a mouse to negotiate through the Internet; this marked the beginning of the World Wide Web (Web).<sup>14</sup> Technically, the Web is a separate, uniform set of computer commands or protocols that overlays the Internet and allows navigation through the Internet by a GUI.

The user friendly protocols and specifications resulting from this project were widely adopted by the Internet community. From then on, the Web became a standard for the Internet communication and information dissemination and the Internet was beginning to be used by other communities for daily computer communications. By the early 1990s, the general public had access to the Internet.<sup>15</sup> Today the commercial usage and exploitation of the Internet has replaced the pure academic approach. The range of the end-user on the Internet reaches from international firms to more and more private persons. Because of the “neuronic” structure of the Internet nobody can say exactly how many computers are linked-up, but today there are about 163,3 million users joining access to the Internet.<sup>16</sup>

## 2.2 The Infrastructure of the Internet

As far as two computers are connected together, so that they can exchange information, a network is built up. The Internet is the underlying collection of various networks.<sup>17</sup> In these networks, public and proprietary computers are

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<sup>12</sup> Beal, *The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solution*, p. 708.

<sup>13</sup> A GUI is a visual format that allows the computer user to point and click with a mouse to access different commands, rather than having to type the commands from the keyboard.

<sup>14</sup> Beal, *The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solution*, p. 708.

<sup>15</sup> Bond, *Linking and Framing on the Internet: Liability under Trademark and Copyright Law*, p. 193.

<sup>16</sup> As of March 1999; Source: Nua Internet Surveys; Network Wizards. By the end of 1999, that number is expected to grow to 200 million, see Rose, *Unlawful Linking and Framing*, p. 2.

<sup>17</sup> For example the networks Ethernet, X.25 or ATM.

connected together to an electronic infrastructure. This forms an international virtual community of millions of computers, people, software programs, databases and files that stretches from one end of the globe to the other ("Internet").<sup>18</sup> When an end-user connects to the Internet, the end-user's computer becomes an extension of what seems like a giant single computer.

The core infrastructure of the Internet consists largely of routers (computers designed to receive and forward packets of data), hosts (which store programs and data) and telecommunications connections which link the hosts and routers together. The user usually access the Internet via a modem through the telephone network provided by telecommunications companies, such as Saix, which is TELKOMs Internet infrastructure in South Africa.<sup>19</sup> At the beginning, only special data pipes could be used for the transmission of the data. Nowadays, every transferring technique is utilised. High-bandwidth transmission is provided for example by ISDN,<sup>20</sup> glass fibre cables, co-axial fibre from cable companies or ADSL, which is being tested.<sup>21</sup> A global satellite network to carry Internet data traffic is already established.<sup>22</sup> In South Africa however, satellite transmissions of Internet data can still only be received and not be sent. Furthermore, even those without access to the Internet are capable of viewing or receiving documents of the Internet facility World Wide Web.<sup>23</sup>

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<sup>18</sup> Microsoft, *Internetworking*, p. 306; Leiner, *History of the Internet*, p. 9.

<sup>19</sup> On the old analogue line the maximum access speed are 33,6 KB/sec, but 56 KB/sec on newer digital lines. Corporate users usually get anything between 64 KB/sec and 256 KB/sec, see NetActivate, Issue 8, 1999, p. 28.

<sup>20</sup> ISDN is the acronym for Integrated Services Digital Network. A digital alternative to current analogue phone lines.

<sup>21</sup> ADSL is the acronym for Asymmetric Digital Subscriber Line; Smith, *Internet Law and Regulation*, p. 12.

<sup>22</sup> Typical satellite bandwidth can vary between 64 KB/sec to 48 MB/sec. This allows a fast and extensive transfer of data, such as graphics, videos or photographic works, see NetActivate, Issue 8, 1999, p. 28 and 29. Satellite transmissions can take place by using cell phones. First-generation cellular services were based on analogue connections. The second generation is the digital service we have today, which can carry voice or text by using limited radio spectrum more frugally. The third generation of cellular service promises unlimited bandwidth provided by hundreds of low-orbit satellites. For example the new SH 888 Elvir@Ericsson cellular phone can transmit data from the

Internet via an infrared link connected to a laptop including a built-in PC-card; see Technology update, August 1998, No.7, p. 16.

<sup>23</sup> For example, new technology permits accessing a URL on a touch tone phone and having Web page faxed to a fax machine. There are also services that will automatically fax Web documents from the Web page itself.

The Transmission of data is based on a software protocol named Transmission Control Protocol/Internet Protocol (TCP/IP).<sup>24</sup> TCP/IP is the common name for a collection of over 100 protocols, which are used to connect computers and network together.<sup>25</sup> This suite of protocols grants the communication of the different networks of the Internet. It is not uncommon that the content of a Web site of a server in South Africa, for instance, is routed via America, even if the user accesses the Internet also in South Africa. This can happen if the user's Internet access provider is a U.S. company with an international network but no peering agreement with another South African network.

The communication on the Internet is guaranteed by a common address system. Every computer, which is Internet-enabled, will have both a Domain Name and an IP address. IP addresses consist of four sets of numbers each between 1 and 255.<sup>26</sup> However, this form of address was unpractical to use. To avoid mix-ups and to offer a user-friendly address system, the domain name system (DNS) was established for the users of the Internet.<sup>27</sup> The DNS is part of an address known as a Uniform Resource Locator (URL).<sup>28</sup> The URL helps users to identify the source of any information on the Internet, for example: <http://www.microsoft.com>, which is the locator for the World Wide Web page of the computer company Microsoft.

The first part, for example [http](http://www.microsoft.com), indicates the access method or protocol used by that server. The [www](http://www.microsoft.com) indicates that the file in question can be found on the World Wide Web and therefore the user has to use a Web browser.

The second part of the address is the computer's fully qualified Domain Name. Domain names generally consist of three components, for example

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<sup>24</sup> Leiner, Cerf and others, *A Brief History of the Internet*, p. 1 and 4-7. The TCP/IP was developed by Robert Kahn and Vinton Cerf (MIT Laboratory for computer science) and later modified by the UC Berkeley. TCP/IP is a new version of the NCP, connected in January 1, 1983.

<sup>25</sup> For more detailed information about TCP/IP, see Yale University's Introduction to TCP/IP at <http://pclt.cis.yale.edu/pclt/comm/tcpip.htm> (visited October 1998).

<sup>26</sup> For example 211.35.188.125; Smith, *Internet Law and Regulation*, p. 8.

<sup>27</sup> Computers are still working with the IP address system. The DN addresses are therefore converted into IP addresses by DNS databases spread across the Internet on various computers world-wide.

"yourname.co.za". The first component stands for the identity of a person or company ("yourname"). The second component is the top level domain name, indicating the type of entity or organisation,<sup>29</sup> followed by the second level domain name, indicating the country of origin (so-called geographical domains, such as ".za" for South Africa or ".de" for *deutschland* (Germany)).<sup>30</sup>

When the idea of DNS was mooted in the United States, little regard was given to the potential of an international naming convention. These days, legal problems regarding the domain name system are a major subject of Trademark law.

### 2.3 The Applications on the Internet

Traditionally a customer was, for instance, searching for a book on a shelf in a bookstore or in a catalogue. He could then buy the book and take it along or he first had to order it and wait for the delivery from where it is stored. Nowadays, the facilities available to users on the Internet are provided by various applications designed to work with Internet protocols, such as browsing, linking, uploading and downloading. Categorically, methods through which one can communicate on the Internet are (1) one-to-one messaging (such as e-mail), (2) one-to-many messaging (such as listserv), (3) distributed message database (such as UseNET newsgroups), (4) real time communication (such as Internet Relay Chat), (5) real time remote computer utilisation (such as telnet), and (6) remote information retrieval (such as File Transfer Protocol (ftp), gopher, and the World Wide Web). Within the use of

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<sup>28</sup> Microsoft, *Internetworking*, p. 315.

<sup>29</sup> The six top-level domain names are .com for company, .org for (non-profit) organisation, .gov for government, .net for network organisations, .edu for academic establishments and .mil for military networks. Own variations can be found for example in South Africa, U.K or Japan where .ac is used instead of .edu or .co instead of .com. In discussion by the so-called International Ad-hoc Committee in order to specify the multitude of domains are .firm, .arts, .web, .nom (for individuals) and .info.

<sup>30</sup> For a complete listing of countries and their Domain Name codes see <http://ftp.nw.com/zone/iso-country-codes> (visited November 1998). For a general description of the Domain Name System, see also Robert Shaw, *Internet Domain Names: Whose Domain is This?*, at <http://www.itu.int/intreg/dns.html>.

these facilities, for example, works can be offered, reproduced, distributed, stored and manipulated. In other words, acts, which a copyright owner is interested to keep the control over. What follows is an overview of the most common facilities on the Internet.

### **2.3.1 Browsing through the Web**

The World Wide Web is commonly known as the World to "click" or "jump" from one Web site to the other. The Web is built on a protocol known as HyperText Transfer Protocol (HTTP),<sup>31</sup> HyperText Mark-up Language (HTML)<sup>32</sup> and other protocols and document formats which underlie the Web. The communication on the Web is guaranteed by using a common address system as described above. It is a system of linking millions of documents on thousands of computers together across the Internet using hypertext links.<sup>33</sup> Clicking on a hypertext link in a Web document can take the user to another place in the same document, to another document on the same computer, or to a document on another computer on the other side of the world. Retrieving documents from Web sites around the world is made possible by a graphical interface called Internet (Web) Browser, for example the Netscape Navigator or Internet Explorer.<sup>34</sup> Due to its user friendly interface, the Web provides a means of accessing the resources on the Internet without requiring the user to know how those resources are stored and transmitted.

On the basis of the borderless nature of the Internet a Web site can reach potentially millions of users all over the world at the same time, regardless of where the actual Web site is set up. This leads to several problems regarding the protection of a copyrighted work. If a user accesses a Web site, for example, at least a copy of the content of the Web site has to be made in his

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<sup>31</sup> The HTTP is used to transmit data between a Web browser's computer and the Web site.

<sup>32</sup> The HTML is the universal language of the Web in which all Web pages are written; see Internet access, Aug/Sep 1998, Issue 8, p. 6.

<sup>33</sup> The function of a Hypertext link and the specific legal problems of its use will be described in a separate section below.

<sup>34</sup> Netscape and Microsoft Internet Explorer are the two leading browsers available on the market.

computer's RAM to make the site visible onscreen. The World Wide Web, already named as the "World Wide West",<sup>35</sup> is becoming subject to increased legal regulation with a number of legal issues already being dealt with by legislatures and courts throughout the world.<sup>36</sup>

### 2.3.2 File Transfer Protocol

File transfer protocol (ftp) is the most widely available method for transferring electronic files from one computer to another across the Internet. Content can range from simple text files, graphics and video to computer programs. Anyone with access to an ftp site can view file names and download files from the archives to the user's own computer for free or for charge. Free-ftp is offered by so-called anonymous ftp. Major ftp server normally stores the same content in different continents to relieve the data flow (so-called *mirroring*).

Contents on the Internet appear in many forms. It divides generally into real-time and downloadable content. Real-time content is that which can be viewed or heard as the user accesses it. As described above, Web sites are an example of real-time content. When the user access a Web site, this content is first stored in his RAM. Downloadable content takes the form of a file, which can be copied, from the Internet site in the user's computer RAM or for permanent storage in the computer's ROM. The user, once off-line from the Internet, uses his own applications to read, view or play the file. The Internet protocol ftp is typically used to download files. Uploading is the process by which a user takes files from his computer and transfers them to another server for access by other users.

Downloadable content can be, for example, music, videos, computer software or images. For a user to hear music or see a video on his computer, all he has to do is download an audio or video file, for example the so-called *RealPlayer*

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<sup>35</sup> Bond, *Linking and Framing on the Internet: Liability under Trademark and Copyright Law*, p. 192.

<sup>36</sup> Schurtz-Taylor, *An overview of some of the present and future problems in the digital information*

5.0,<sup>37</sup> which is the required software to play music or videos on a computer. A user can also find legally various software on the Internet on so-called freeware or shareware sites to download onto his hard disk.<sup>38</sup> However, downloading software is not always authorised and illegal copying of software for retail sale or international organisational use is a major problem for software innovation. The facility to download and upload computer games on bulletin boards already lead to several legal disputes in the United States.<sup>39</sup> These legal problems will be examined in a separate chapter below.<sup>40</sup>

### 2.3.3 Electronic-mail and Mailing lists

Electronic-mail<sup>41</sup> (e-mail) offers the possibility for Internet users to communicate with each other by sending messages in the form of e-mail. E-mails can contain text or other data, such as graphics, images and videos. The transmission of an e-mail, unlike the traditional correspondence by post, can be within a few seconds from one computer to another.<sup>42</sup> An e-mail address contains the name of the user and the name of the Internet computer that he takes use of and at which the user has his Internet account (a so-called host). Receiving mail is made possible by the Post Office Protocol 3 (POP3). POP3 is a client-server protocol in which e-mail is received and held by the Internet server until the end-user downloads it.<sup>43</sup>

E-mails can also be distributed to a group of users. This is provided through mailing lists or so-called listservs, which are administered by some central

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*society*, p. 1 et seq.

<sup>37</sup> <http://www.real.com> (visited November 1998). RealPlayer incorporates RealAudio, for playing back real time ("streaming") audio. It also contains RealVideo, which provides the facility to play back streaming video.

<sup>38</sup> For example on a South African server see <http://tucows.co.za> or <http://www.games.mweb.co.za> (visited June 1999).

<sup>39</sup> See for example *Sega Enterprises Ltd. v Maphia* 948 F. Supp. 923, 41 U.S.P.Q.2d (BNA) 1705 (N.D. Cal. 1996), see (<http://www.bna.com/e-law/cases/sega2.html>) (last visited May 1999).

<sup>40</sup> See Chapter 3 (Liability of online providers).

<sup>41</sup> This application was introduced in 1972.

<sup>42</sup> The "post-offices" of the Internet are for example Netscape mail, Eudora Light, Pegasus or Microsoft Outlook Express.

<sup>43</sup> Internet access, Aug/Sep 1998, Issue 8, p. 7.

host.<sup>44</sup> Within these services, messages are automatically sent to the mailbox of every subscriber.<sup>45</sup> Legal problems can arise, if in this context, a user transmits a digitised work, which is protected by copyright.

#### 2.3.4 UseNET

Similar to mailing lists or listservs is the Usenet, which is a world-wide distributed public discussion forum of about 15 000 newsgroups, to which users contribute or "post" messages or articles on a particular topic.<sup>46</sup> As a result, any material posted to a Usenet newsgroup is virtually guaranteed to be published, and read, in many hundreds of national jurisdictions. Usenet servers maintain the posted work for a short period of time.<sup>47</sup> Each Usenet site distributes its user postings to other Usenet sites, based on various implicit and explicit configuration settings, and in turn receives postings from other sites. A user needs to have a special "newsreader" program.

#### 2.3.5 Bulletin Board Services

Computer owners possessing the essential communication software and hardware may operate a bulletin board service (BBS). BBS consists of electronic storage media, such as computer memories or hard disks, which are connected to telephone lines by modem devices, and are controlled by a computer. BBS's are used for electronic posting of announcements and correspondence between users.<sup>48</sup> The content of an electronic message can be a message to somebody, but may also consist of software like video game programs, digitised music, scanned pictures, or other information capable of

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<sup>44</sup> Edwards, *Defamation on the Internet*, p. 186.

<sup>45</sup> Listservs usually have a focal point of interests. Law-related discussion lists can be found for example in the U.S. at (<http://www.lib.uchicago.edu/~llou/lawlists/lawlists.txt> (visited October 1998)).

<sup>46</sup> Smith, *Internet Law and Regulation*, p. 7; Edwards, *Defamation and the Internet*, p. 186. See also *Religious Technology Center v Netcom On-Line Communication Services*, 907 F.Supp. 1361, 37 U.S.P.Q.2d (BNA) 1545 (N.D. Cal. 1995).

<sup>47</sup> In the Netcom case, the work was stored for eleven days.

being stored and interpreted by a computer.<sup>49</sup> Most of the BBS operators charge users a fee for access to the system, which allows users to either upload or download information.

### 2.3.6 Internet Relay Chat

Internet Relay Chat (IRC) allows the user to engage in synchronous conversation with other users by typing on a keyboard.<sup>50</sup> There are many thousands of IRC channels offering discussion on a wide variety of topics.

In this context the service Mud's has also to be named, which stands for Multi User Dialog. This is a service in which many users interact and is primarily used for gaming purposes.

### 2.3.7 Gopher

Originally a gopher is a burrowing mammal of the Geomyidae family.<sup>51</sup> On the Internet, since 1991, it is an information resource, which provides for simple navigation through a hierarchy of menus.<sup>52</sup> It allows the user, through cross references and interlaced menus, to "burrow" to other Gopher servers or FTP archives.<sup>53</sup> When the user selects an item, Gopher retrieves the corresponding document, provides a searchable index, or displays the next menu. Gopher displays only text; thus, transfer of more complex data structures, such as sounds and images, requires use of other software. Today, the Web has incorporated Gopher's protocol. Although Gopher is still a menu-driven system, the Web browser translates the Gopher information into a graphical format and provides a user-friendly, point-and-click interface.

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<sup>48</sup> Dobbins, *Computer Bulletin Board Operator Liability for Users' Infringing Acts*, p. 217.

<sup>49</sup> Dobbins, *Computer Bulletin Board Operator Liability for Users' Infringing Acts*, p. 217.

<sup>50</sup> For detailed information see <http://irchelp.org> (visited May 1999).

<sup>51</sup> Vormanek, *The Internet and Gopher*, jur-pc 9/1993, 2286.

<sup>52</sup> Terrett, *A Lawyer's Introduction to the Internet*, p. 22.

<sup>53</sup> Zakon, *Internet Timeline*, p. 10.

## 2.4 Changing Aspects of the Digital Era

*"The most pressing question for the future of the Internet is not how the technology will change, but how the process of change and evolution itself will be managed".<sup>54</sup>*

Internet, Multimedia, Information Superhighway, CD-ROM, Video-on-demand, Audio-on-demand, Pay-per-view, Pay-per-channel, Pay-TV, Digital Audio Broadcasting, Electronic Banking, Global Information Society, Teleshopping, Teleteaching, Teleworking, Data Highway, Digital Television - this list of the terms, which are to describe the electronic present and future, is extensive and could be continued almost endlessly. The technology, that stands behind these key-words, leads to new problems, that are introduced in the following.

### 2.4.1 Overview of Problem issues

The development and use of new communication and information technology has progressed rapidly and still does. This process leads to new problems in the existing laws and therefore requires flexible jurisprudence, adaptations of legislation, and the establishment of new forms of copyright law. In this connection, Internet law can be seen as the connecting link between law and technology.

Driven by its meteoric growth, the Internet is currently revolutionising a number of economic sectors. The vast majority of Internet content is for purposes of information for legitimate business or private usage. However, the Internet offers also access to illegal contents and the possibility, to become criminal active.

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<sup>54</sup> Leiner, Cerf and others, *A Brief History of the Internet*, p. 13.

The problem areas are:

- national security (instructions on bomb-making, illegal drug production, terrorist activities);
- protection of minors (abusive forms of marketing, violence, pornography);
- protection of human dignity (incitement to racial hatred or racial discrimination);
- economic security (fraud, instructions on pirating credit cards);
- information security (hacking);
- protection of privacy (unauthorised communication of personal data, electronic harassment);
- protection of reputation (libel, unlawful comparative advertising);
- intellectual property (e.g. unauthorised distribution of copyrighted works).

First, it is necessary to address the issue of what is actually new in the context of digitisation and networking when viewed from the copyright law perspective.

### **2.4.2 The Digital Era**

Our present law of intellectual property and copyright was developed to deal with real items, even if the intellectual property and copyrights themselves are intangible. Traditionally, a copyright work has a permanent form, such as paintings, sculptures or is physically written down, for example the paper document or book exists as a self-contained unit, easily to distinguish from the next on the shelf.

In the digital era copyright protected works can be reduced to binary digits and stored in a digital form.<sup>55</sup> The letters are changing into bytes and the paper is replaced by storing devices, for example a hard disk or a CD-ROM.

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<sup>55</sup> Computers can only operate on binary digits, so information must be reduced to such numbers (1's and 0's) if a work is to be fed in a computer. See Smith, *Internet Law & Regulation*, p.13 and Van der Merwe, *Copyrights and Computer*, p. 182.

This technology disrupts the traditional boundaries and control over the separate works. The World Wide Web, for example, takes the covers off the books and stitches the pages together. In the digitised world of the Internet, people can receive information instantaneously through a continuously available, borderless distribution network. These features of the Internet are also the source of some of its greatest problems. Because of the digital format, a copy or a transmission of a work on the Internet can take place without perceptible degradation in the quality, within a hundred of a second and with practically no cost.<sup>56</sup> This makes works in digital format easier to use and exploit than traditional forms of information.<sup>57</sup> Digitisation also allows the user to easily remove an author's name from a work, substituting his own name, another's, or none at all.<sup>58</sup> It allows the user to alter text, insert words, delete paragraphs, etc. Other mediums, such as pictures, music and motion pictures can also be modified. This makes it much easier for users to create their "own" works.

The storage and the availability of a work on the Internet offer multiple new possibilities to access and use the work. Works can be found unauthorised stored on a commercial or private server, in foreign countries and free of charge accessible. One of the main problems is, that everybody who is - authorised or unauthorised - in possession of a copyrighted work of a third party, is able to upload it on the Internet.<sup>59</sup> And as soon as only one copy is stored and accessible on the Internet, everybody in the world with Internet access is able to make an (illegal) copy and may infringe on more than one of a copyright owners rights. Copyright holders have always been worried about new copying technology. Photocopy machines, cassette recorders, and video recorders have all been thought to be a threat to copyright. However, these methods of copying take time, cost money, and usually the quality of the copy is not as good as the original one. With digitisation, none of these

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<sup>56</sup> Fujita, *The Great Internet Panic: How Digitization is Deforming Copyright Law*, p. 5; Dreier, *Copyright Law and Digital Exploitation of Works*, p. 3; Smith, *Internet Law & Regulation*, p. 14.

<sup>57</sup> Fujita, *The Great Internet Panic: How Digitization is Deforming Copyright Law*, p. 5.

<sup>58</sup> Fujita, *The Great Internet Panic: How Digitization is Deforming Copyright Law*, p. 6.

<sup>59</sup> If not already digitised, for example, a photograph can be scanned and put on the Internet in a few minutes.

disincentives to copy exists, which makes copyright holders afraid that users will decide to "steal" the information rather than pay for it. In contrast to photocopy machines, cassette and video recorders, where copying became practical, widespread and untraceable, this problem may be eliminated in the digital era. With the appropriate technology, one can determine every time a copy of a work is made and who made it.<sup>60</sup> A work on the Internet could be registered and issued with a coded tag in the same way that books are issued an identification number (ISBN).<sup>61</sup> The coded tag could contain such information as the country of deposit, the organisation holding the work, the deposit number, the date of deposit, the type of work and if necessary the licensing conditions.<sup>62</sup> This is already being done with software by the Agence pour la Protection des Programmes (APP) in Paris and the Japanese are examining a similar scheme.<sup>63</sup> However, this would require a strict monitoring that would violate the privacy rights of users.<sup>64</sup> A fair balance still has to be found.

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<sup>60</sup> Fujita, *The Great Internet Panic: How Digitization is Deforming Copyright Law*, p. 6.

<sup>61</sup> Schurtz-Taylor, *The Internet Experience and authors rights: An overview of some of the present and future problems in the digital information society*, p. 119.

<sup>62</sup> Schurtz-Taylor, *The Internet Experience and authors rights: An overview of some of the present and future problems in the digital information society*, p. 119.

<sup>63</sup> Bechtold, *Multimedia und Urheberrecht* (Multimedia and Copyright), p. 19.

## Chapter 3

### 3 The International Harmonisation of Copyright Protection

Because the global character of the Internet lead to "international" infringements, governments are considering the prospect of reaching international accord on the protection of intellectual property in the digital era. Especially the quick adoption of the WIPO Treaties in December 1996, described as a first "milestone" of adaptation, showed that an international realisation for a call for action is existing.

#### 3.1 International Copyright Law

##### 3.1.1 Berne Convention

The Revised Berne Convention<sup>65</sup> (hereinafter BC) is a contract in public international law. Besides South Africa,<sup>66</sup> most states have acceded to this convention,<sup>67</sup> except, for example Russia, China, parts of Africa and Canada.<sup>68</sup> Since 1989 the U.S.A. also became a convention member.<sup>69</sup> The BC sets minimum standards for national copyright legislation and contains binding *ius conventionis*, which is to be respected in all Union countries, and which every Union author can invoke.<sup>70</sup> The BC declares in article 5 of the BC that national law will be applicable to foreigners. Foreign copyright owners

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<sup>64</sup> Fujita, *The Great Internet Panic: How Digitization is Deforming Copyright Law*, p. 11.

<sup>65</sup> Berne Convention for the Protection of Literary and Artistic Works (September 9, 1886, last revised in Paris at July 24, 1971). Beside of the Paris Version (Paris Act), a few states signed to the Brussels Version of 1948 (for example South-Africa), Rome Version of 1928 or Berlin Version of 1908 (just Thailand).

<sup>66</sup> Dean, *Handbook of South African Copyright Law*, p. 1-91.

<sup>67</sup> Over eighty; Wijk, *Intellectual Property*, p. 36. A list of Berne Convention Countries can be found in Alan Smith, *Copyright Companion*, p. 184-185.

<sup>68</sup> Nordemann, *International Copyright*, World Map inside book covers.

<sup>69</sup> Latman, *Copyright for the Nineties*, p. 791.

<sup>70</sup> Nordemann, *International Copyright, Berne Convention*, Art. 2/2bis BC, p. 48; Wijk, *Intellectual*

therefore shall receive the same protection, as would a local copyright owner. Article 5(2) of the BC provides that copyright protection "shall be governed exclusively by the laws of the country where protection is claimed."

Furthermore, the BC guarantees in articles 6 to 15 of the BC a substantive minima of protection for foreign copyright owners, even if the domestic legislation of the country of origin or of the country where protection is sought (country of protection) does not protect all of his works or, for example, moral rights or forms of exploitation.<sup>71</sup>

### **3.1.2 Universal Copyright Convention**

The Universal Copyright Convention (UCC) was signed September 6, 1952 in Geneva and revised in Paris, July 24, 1971.<sup>72</sup> South Africa is not a signatory of this convention. Each contracting state undertakes to provide for the adequate and effective protection of the rights of authors and other copyright proprietors in literary, scientific and artistic works, including writings, musical, dramatic and cinematographic works, and paintings, engravings and sculpture.<sup>73</sup>

The UCC does not grant one single right to authors and other holders of rights that would have direct enforceability in the contracting countries and which the creator of a work could invoke directly. The UCC contains no rules or regulations that would permit the enforcement of a claim by direct invocation of Convention law.<sup>74</sup> The level of protection is lower than in the Berne Convention and after the USA was contracted into the Berne Convention in 1989, the UCC only has importance in relation to countries like Russia, Cambodia, parts of Africa and Latin America.

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*Property*, p. 35.

<sup>71</sup> Latman, *Copyright for the Nineties*, p. 792.

<sup>72</sup> Dean, *Handbook of South African Copyright Law*, p. 1-92.

<sup>73</sup> Article I of the UCC.

<sup>74</sup> Nordemann, *International Copyright, Universal Copyright Convention*, Art. I UCC, p. 217.

### 3.1.3 Rome Convention

The Rome Convention is an International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organisations done in Rome, October 26, 1961. It does belong to the so-called related rights, for example it applies to musicians and actors, who did not create their own work, but performed another work. The rights adjoin copyright and closely resemble copyright in organisation, but are not subsumed within copyright.<sup>75</sup>

### 3.1.4 TRIPS-Agreement

In April 15, 1994 an agreement was signed in the Uruguay Round regard to Trade-Related Aspects of Intellectual Property Rights (hereinafter TRIPS-Agreement).<sup>76</sup> The TRIPS-Agreement is a further development of the General Agreement on Tariffs and Trade (GATT). It protects the intellectual property, copyright and related rights. The standard of protection to be afforded in relation to copyright and related rights may be summarised as follows: Members shall comply with articles 1-21 of the Berne Convention (Paris Act 1971), with the exception of moral rights falling outside the scope of the agreement.<sup>77</sup> South Africa, which has acceded to the TRIPS-Agreement, has bound itself to accord to foreign countries which are members of the World Trade Organisation the measure of copyright protection for in the substantive provisions of the Paris Text of the Berne Convention.<sup>78</sup>

### 3.1.5 WIPO-Treaties

The World Intellectual Property Organisation (WIPO) is the United Nations specialised agency, which administers most Intellectual Property

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<sup>75</sup> Latman, *Copyright for the Nineties*, p. 795.

<sup>76</sup> Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organisation, Legal Instruments - Results of the Uruguay Round vol. 31; 33 I.L.M. 81 (1994); see Garnett & others, in Copinger and Skone James on Copyright, First Supplement, 1-61 and 1-61B.

<sup>77</sup> Article 9 of the TRIPS-Agreement.

conventions.<sup>79</sup> WIPO is attempting to revise the international copyright norms contained in the Berne Convention on Literary and Artistic Works in the light of recent technological developments such as the advent of digital technologies and the Internet.<sup>80</sup> In Geneva, Switzerland in December 20, 1996 a diplomatic conference of WIPO took place, which was aimed at tightening international copyright law to respond to issues arising from world-wide use of the Internet. The Conference was also designed to bring existing legislation on copyrights more in line with the provisions of the TRIPS-Agreement. Two contracts (WIPO *Copyright Treaty*<sup>81</sup> (in the following WCT) and the WIPO *Performances and Phonograms Treaty*<sup>82</sup> (in the following WPPT)) were adopted by 127 nations. A third treaty on establishing a *sui generis* database right failed to achieve consensus.<sup>83</sup> South Africa has not signed any of these treaties.

The WIPO treaties lay an important foundation for protection on the Internet. The relevant provisions of these treaties will be discussed throughout this dissertation. The legislative history to the treaties took the form of several "Agreed Statements". Under the Vienna Convention, an Agreed Statement is evidence of the scope and meaning of the treaty language.<sup>84</sup>

Some of the main features of the treaty on copyright are:

- The establishment of a digital transmission right, described in the WCT treaty as the exclusive right of the authors of literary and artistic works to

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<sup>78</sup> Dean, *Handbook of South African Copyright Law*, p. 1-92.

<sup>79</sup> At <http://www.wipo.org> (visited October 1998).

<sup>80</sup> See the Preamble of the WIPO Copyright Treaty.

<sup>81</sup> The WCT is a special agreement within the meaning of article 20 of the Berne Convention for the Protection of Literary and Artistic Works. This Treaty, according to article 1, "shall not have any connection with treaties other than the Berne Convention, nor shall it prejudice any rights and obligations under any other treaty." The WCT can be found at <http://www.wipo.org/eng/diplconf/distrib/94dc.htm> (visited November 1998).

<sup>82</sup> The WPPT strengthens the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organisation (Rome Convention) and nothing in the WPPT shall derogate from existing obligations that Contracting Parties have to each other under the Rome Convention, article 1(1) of the WPPT. The WPPT can be found at <http://www.wipo.org/eng/diplconf/distrib/95dc.htm> (visited November 1998).

<sup>83</sup> As provided in the EC Directive Protection of Databases.

<sup>84</sup> Vienna Convention on the Law of Treaties, May 23, 1969, article 31(2), 1155 U.N.T.S. 331.

"authorise any communication to the public of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access these works from a place and at a time individually chosen by them".<sup>85</sup>

- Contracting parties are at liberty to provide for limitations of, or exceptions to, rights in certain special cases that do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the author.<sup>86</sup>
- Contracting parties shall provide adequate legal protection and effective legal remedies against circumvention of copy-protection technology.<sup>87</sup>
- It prohibits the unauthorised removal or alteration of information about the ownership rights of a work, known as rights management information and it requires that each country's implementing legislation provide enforcement procedures.<sup>88</sup>

## 3.2 United States

### 3.2.1 Report on Intellectual Property Rights

The United States administration has set up a Working Group on Intellectual Property Rights, a subcommittee of the Information Infrastructure Task Force to plan for and implement the National Information Infrastructure (NII), a visionary network that encompasses the Internet, bulletin board systems, television, radio, telephones, and beyond (commonly referred to as the "White Paper").<sup>89</sup> The working group proposed to deal with the main problems that it perceived arising from dealings with works in cyberspace by amending the US

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<sup>85</sup> Article 8 of the WCT. Performers are similarly protected under article 10 of the WPPT.

<sup>86</sup> Article 10 of the WCT and article 16 of the WPPT.

<sup>87</sup> Article 11 of the WCT and article 18 of the WPPT.

<sup>88</sup> Articles 12 and 14 of the WCT and articles 19 and 23 of the WPPT.

<sup>89</sup> The Report of the Working Group on Intellectual Property Rights, Intellectual Property and the National Information Infrastructure (1995) (commonly referred as the "White Paper") can be found on the Internet at <http://iitf.doc.gov/>. See also Cover, *The Emperor's Magic Suit: Proposed Legislation Will Taylor the Copyright Law to Fit the Internet*, p. 1; Fujita, *The Great Internet Panic: How Digitization is Deforming Copyright Law*, p. 2; Pearson, *Information in a Digital Age*

Copyright Act. These amendments include defining existing infringing acts such as "distribution", "publication" and "importation" to include unauthorised electronic transmission of a work where the primary purpose or effect of the transmission is to distribute a copy of the work. The most controversial aspect of the White Paper centres on its recommendation that the transmission of copies and phonorecords should fall within the exclusive distribution right of the copyright owner.<sup>90</sup> It is also proposed to make it illegal to circumvent copy protection technology, and to provide for a scheme of copyright management information to be attached to the work, and making it illegal to falsify such information or remove it without authority.<sup>91</sup> The working group also proposed that the elements of criminal copyright infringement be amended by removing the requirement that the defendant has to obtain monetary gain from the infringement.

### 3.2.2 No Electronic Theft Act

Described as "perhaps the most promising development in the war against the pirating of software available on the Internet", is the No Electronic Theft Act, or NET Act.<sup>92</sup> Signed by President Clinton in 1997, it is the first major piece of Internet-related copyright legislation passed by the 105th Congress.<sup>93</sup> The NET Act was promoted and passed primarily to eliminate the "personal profit" requirement, or so called *LaMacchia* loophole, in the federal copyright statute.<sup>94</sup> The *LaMacchia* loophole is a reference to the 1994 case of *United States v LaMacchia*, which showed the borders of protection by copyright to comply with the infringement on the Internet<sup>95</sup> The defendant in *LaMacchia*, a graduate student at Massachusetts Institute of Technology, encouraged lawful purchasers of computer games to upload computer games (using a

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- *The Challenge to Copyright*, p. 6.

<sup>90</sup> Fujita, *The Great Internet Panic: How Digitization is Deforming Copyright Law*, p. 7.

<sup>91</sup> Pearson, *Information in a Digital Age - The Challenge to Copyright*, p. 6.

<sup>92</sup> Lawrence/Lobsenz, *Software on the Internet Invites Piracy*, pp. 3, 4.

<sup>93</sup> Lee, *Toward a More Balanced Online Copyright Policy*, p. 55.

<sup>94</sup> Smith, *Internet Law and Regulation*, p. 19; Lee, *Toward a More Balanced Online Copyright Policy*, p. 55.

<sup>95</sup> *United States v LaMacchia*, F.Supp. 535 (D.Mass.1994).

password) to a bulletin board system (BBS) available via the Internet. LaMacchia transferred the games to another BBS, where users could download the games for personal use, without compensating the copyright holders. LaMacchia did not benefit financially from these activities. He was charged by the government under the federal wire fraud statute. The government did not attempt to prosecute David LaMacchia under the criminal copyright statute because that statute requires proof that the defendant sought to profit personally from a scheme to defraud.<sup>96</sup> Finally, a federal district court in Massachusetts dismissed the claims against LaMacchia, finding that Congress did not intend for copyrights to be protected under the federal wire fraud statute. The court also found that the criminal sanctions for copyright infringement did not apply in instances in which a defendant did not recognise a commercial advantage or private financial gain.

Before the NET Act, hackers like LaMacchia, who harmed copyright owners by causing significant lost sales revenue but who themselves do not gain financially, could not be prosecuted. The NET Act provides better copyright protection by amending the provisions governing criminal copyright infringement. As amended by the NET Act, criminal liability will attach if a person wilfully infringes a copyright "for purposes of commercial advantage or private financial gain".<sup>97</sup> "Financial gain" under the United States Copyright Act does not necessarily means receiving money. The definition of "financial gain" includes "receipt, or expectation of receipt, of anything of value, including the receipt of other copyrighted works."<sup>98</sup> Furthermore under the new amendment, it is already sufficient, if over any 180-day period, person copies one or more programs having a total retail value of more than \$ 5 000, even if no profit motive of any kind is involved.<sup>99</sup>

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<sup>96</sup> Cover, *The Emperor's Magic Suit: Proposed Legislation Will Tailor the Copyright Law to Fit the Internet*, p. 6.

<sup>97</sup> 17 U.S.C. 506(a)(1), as amended by the NET Act.

<sup>98</sup> 17 U.S.C. 101 ("financial gain").

<sup>99</sup> 17 U.S.C. 506(a)(2), as amended by the NET Act.

### 3.3 The European Development to Harmonise the Copyright Law

The European Community (EC) presently consists of fifteen Member States.<sup>100</sup> Each Member State has national laws relating to copyright. EC law, however, affects the laws of the Member States and may supersede national legislation.

Varying levels of copyright protection from Member State to Member State cause uncertainties in trade and business transactions, resulting in a depressed market for intellectual property. In contrast, consistent copyright legislation among Member States fosters a strong business climate and encourages trade. As a result, the European Community has encouraged community-wide harmonisation of copyright laws. The development of the copyright in Europe is also of interest for the South African Copyright Law. Since copyright protection in South Africa is derived from U.K. law, important amendments in the EC could be of the same necessity for the Act to avoid gaps in the law.

In the last eight years the European Commission has responded to the changing technology by adopting several directives.<sup>101</sup>

- The Directive on the Legal Protection of Computer Programs (May 15, 1991)
- The Directive on Rental Right and Lending Right and on Certain Rights Related to Copyright in the field of Intellectual Property (November 19, 1992).
- The Directive on the Co-ordination of Certain Rules Concerning Copyright and Rights Related to Copyright Applicable to Satellite Broadcasting and Cable Retransmission (September 9, 1993).

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<sup>100</sup> The six original members of the European Community were Belgium, France, Germany, Italy, Luxemburg and the Netherlands. Denmark, Ireland, the United Kingdom, Greece, Spain, Portugal, Sweden, Finland and Austria later joined them.

<sup>101</sup> See Garnett & others, in Copinger and Skone James on Copyright, 1-51B to 1-58B, p. 4-23. A directive is not directly binding as law in itself. EC member states have to enact implementing legislation to amend existing national legislation to comply with the directive.

- The Directive Harmonising the Term of Protection of Copyright and Certain Related Rights (October 10, 1993).
- The Directive Protection of Databases (March 11, 1996).
- The Proposal for a Directive of the Copyright and Related Rights in the Information Society (December 10, 1997).<sup>102</sup>

The Proposal for a Directive of the Copyright and Related Rights in the Information Society contains mainly the provisions of the WIPO treaties. It generally aims to the harmonisation of the right of reproduction, the right of public communication, especially the offer on a digital network, as well as their limitations in a digital environment.

The commission of the EC also published a Green Paper named Copyright law and the technical challenge (1988), a working program in the sphere of the copyright law and related rights (1991), a so-called Bangemann<sup>103</sup>-Report Europe and the global information society (26.5.1994) and another Green Paper titled Copyright law and related rights in the information society (13.3.1996) which was followed by Initiatives basing on the Green Paper (Copyright law and related rights in the information society) in November 11, 1996.

In the introduction to the Green Paper of March 13, 1996, the European Commission stated that the full development of the information society in Europe would require harmonisation of laws, including intellectual property laws, to ensure that right holders would make material available while balancing the interests of users.<sup>104</sup> The Green paper identifies certain key issues to the application of copyright to new technology. These are the new services on the Internet, in particular the effects of digitisation and the interactive nature of such services, the new market structures and the importance of cross-border transmissions. These raise a number of legal

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<sup>102</sup> Proposal for a European Parliament and Council Directive on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society, 1998 O.J. (C 108) 6.

<sup>103</sup> Named after Martin BANGEMANN who is a minister in the EU commission.

<sup>104</sup> The Green Paper can be found at <http://www.echo.lu/legal/en/internet.html> (visited November 1998).

issues, including the identification of the author, the applicability of the traditional concept of "originality" as a condition for protection, the concept of "first publication" when a work can be simultaneously disseminated world-wide, the concept of "fair use", the question of "private use" exceptions and the scope of exclusive rights. The Commission also proposed that these new rights cover digitisation, scanning, uploading and downloading of protected material to include transient and other incorporeal acts of reproduction. Lastly, the distribution right should be harmonised so that only the first sale within the Community by or with the consent of the copyright holder exhausts the right; and exhaustion should not apply to services, including on-line services. The EC directives and Green papers will be further discussed throughout this dissertation as they relate to the various issues treated herein.

## Chapter 4

### 4 South African Law and the Internet

Copyright Law in South Africa is governed by the Copyright Act 98 of 1978, as amended, that provides that no copyright or right in the nature of copyright shall subsist otherwise than by virtue of its provisions or some other enactment in that specific regard.<sup>105</sup> In general terms, the Copyright Act vests several exclusive rights to the author of a work concerning the reproduction and exploitation of his work. There are basically two main systems of author's rights in the world. That of copyright in the common (Anglo-American) law countries and that of *droit d'auteur* in the civil law countries. Under copyright in the common law the accent is on the product and its economic value, whereas under *droit d'auteur*, the author comes first and his production after. South Africa has traditionally followed the common law tradition, rather than the civil law.<sup>106</sup> In short terms one may say that South African copyright law ensures the author to control the use of his work in all manners in which it can be exploited for personal gain or profit.<sup>107</sup>

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<sup>105</sup> Section 41(4) of the Act.

<sup>106</sup> Although the common law systems take a different approach to copyright than the civil law systems, this final result can be attributed to both of them. Great Britain and Ireland are the only two countries in the European Union whose copyright laws follow the common (Anglo-American) copyright tradition. The analogue of copyright in the civil law world is known as *droit d'auteur* (France), *derecho de autor* (Spain), *Urheberrecht* (Germany) (translated as *author's right*). The Afrikaans term is *outeursreg*. This difference in terminology between the common law *copyright* and the civil law *author's right* reveals a fundamental difference in attitude about works of authorship between the two legal traditions. The term *copyright* is an impersonal one, removed from the author. It connotes a negative right, the right of the owner to prevent copying of his work. The general philosophy of copyright in the common law world is to provide material support to one who invests in producing the work. Thus it is economical orientated. By comparison, the civil law tradition views the author's work as an extension of his personality which springs into existence by a personal act of creation. This view reflects a more sympathetic attitude towards the author. In the civil law world an author is deemed to have a moral entitlement to control and exploit the product of his intellect. See Merwe, *Copyright and Computers, with special reference to the Internet*, p. 181; Garnett & others, Copinger and Skone James on Copyright, 1-51 and 1-51A, p. 3 and 4.

<sup>107</sup> Dean, *Handbook of South African Copyright Law*, p. 1-1 and 1-37.

The South African Copyright Act distinguishes between the exploitation rights and moral rights. The exploitation rights are listed in sections 6 - 11B of the Act<sup>108</sup> and the moral rights in section 20 of the Act. Any interference with these rights usually constitutes copyright infringement,<sup>109</sup> unless the user might claim a valid exception.<sup>110</sup>

The scope of copyright protection depends on the category that the work belongs to.<sup>111</sup> In order to acquire a fuller indication of the nature of each type of copyright work, the reader is referred to the specific paragraph dealing with the type of work concerned.

#### **4.1 The work on the Internet**

First of all it has to be examined if a digital work on the Internet is protected in the same way as a "traditional" work. The Copyright Act of 1978 currently protects certain categories of works, including literary, musical and artistic works, sound recordings, cinematographic films, broadcasts, programme-carrying signals, published editions and computer programs.<sup>112</sup> Existing copyrighted works can be uploaded on the Internet by different technical processes. However, digitisation as such does not attract protection to the benefit of a person or entity that merely digitises analogue material.<sup>113</sup> New types of "works", regarding the Internet, are for example Web sites, collection of links, e-mails or multimedia works. Like computer programs in the past, it is now important to categorise these new "works" within the list of works under section 2(1) of the Act. This list is exhaustive, i.e. copyright protection is only granted as far as those new "works" can be categorised within these categories.<sup>114</sup>

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<sup>108</sup> All sections refer to the South African Copyright Act 98 of 1978; otherwise it is indicated.

<sup>109</sup> Section 23 of the Act.

<sup>110</sup> Sections 12 - 19B of the Act.

<sup>111</sup> Sections 6 - 11B of the Act.

<sup>112</sup> Section 2(1) of the Act.

<sup>113</sup> Dreier, *Copyright Law and Digital Exploitation of Works*, p. 8.

<sup>114</sup> Smith, *Copyright Companion*, p. 5.

#### 4.1.1 Conditions for Subsistence of Copyright

First, for copyright to subsist in a work, the work must be original in character.<sup>115</sup> "Originality" means that the work should not be copied from an earlier work and the work must be created as a result of the skill and effort of the creator.<sup>116</sup> The uncertainty of the terms "skill" and "effort" gives rise to considerable difficulty in determining the requirements for authorship of a work. Furthermore the work must be "reduced to a material form". In particular, a work must be "written down, recorded, represented in digital data or signals or otherwise reduced to a material form".<sup>117</sup> Although the Copyright Act does not provide any definition for the term "represented in digital data", it can be assumed that material published on the Internet does comply with this provision. The purpose for this provision is the maxim in copyright law that there is no copyright in ideas.<sup>118</sup> It is rather the material form of expression of the idea that is the subject of copyright. Digital works usually are stored on a data medium, such as a hard disk, CD-ROM, floppy disc or DAT.<sup>119</sup> This storage is comparable to the fixation of sounds (notes) on a record.<sup>120</sup> It follows that even if the data are intangible, by the storage of the digital work on any data medium, they are fixed on a material form.<sup>121</sup> Thus, digital works are eligible for copyright in the meaning of section 2(2) of the Act.

However, due to the transmission of the work on the Internet or temporary storage devices, such as the Random Access Memory (RAM) of the user's

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<sup>115</sup> Section 2(1) of the Act.

<sup>116</sup> *Kalamazoo Division (Pty) Ltd v Gay* 1978 2 SA 184 (C); Smith, *Copyright Companion*, p. 9; Dean, *Handbook of South African Copyright Law*, p. 1-15-1-17.

<sup>117</sup> Section 2(2) of the Act. See also section 44 of the Act, i.e. section 44(1) of the Act reads as follows: "For the purposes of this Act a work, except a broadcast or programme-carrying signal, shall be deemed to have been made at the time when it was first reduced to writing, recorded or otherwise reduced to material form." See also Dean, *Handbook of South African Copyright Law*, p. 1-17 and 1-18.

<sup>118</sup> Dean, *Handbook of South African Copyright Law*, p. 1-18.

<sup>119</sup> DAT is the acronym for Digital Audio Tape.

<sup>120</sup> Section 1(1) of the Act defines "record" as follows: 'record' means any disc, tape, perforated role or other device in or on which sounds, or data or signals representing sounds are embodied or represented so as to be capable of being automatically reproduced or performed therefrom;". See also Dreier, *Copyright on its way to the information society*, p. 861.

<sup>121</sup> *MacQueen, Copyright and the Internet*, p. 80. See also *Northern Office Microcomputers (Pty) Ltd & others v Rosenstein* 1981 (4) SA 123 (C), where the court ruled that a computer program was reduced to material form, once the instructions had been recorded on floppy disc.

computer, it is in question if a digitised work generally fulfils the condition of a material form in the meaning of existing copyright law. This specific problem will be examined below.

Copyright does not subsist in a work unless the author is a qualified person or the work was first published in the Republic of South Africa.<sup>122</sup> For the purposes of the Act, a qualified person is one who, at the time when the work or a substantial part of it is made, is a South African citizen or is domiciled or resident in the Republic or, in the case of a Jurassic person, is a body incorporated under the laws of the Republic.<sup>123</sup> In the case of a work of joint authorship, it is only necessary for one of the authors to comply with these provisions.<sup>124</sup> This could be the case, if a Web site was set up by a South African programmer working together with a Canadian programmer over the Internet.

Alternatively a work has to be published in such a way that the first publication gives rise to copyright. With the exception of cinematograph films and sound recording,<sup>125</sup> a work is "deemed to have been published if copies have been issued to the public with the consent of the copyright owner in sufficient quantities to reasonably meet the needs of the public, having regard to the nature of the work".<sup>126</sup>

#### 4.1.2 The individual works

Many different kind of works can be found on the Internet, but it has to be kept in mind that today's technology does not allow widespread exploitation of copyrighted works, especially with regard to music and video programs. Broadband technologies, however, may soon make it possible to create

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<sup>122</sup> Section 3 and 4 of the Act.

<sup>123</sup> Section 3(1) of the Act.

<sup>124</sup> Dean, *Handbook of South African Copyright Law*, p. 1-19.

<sup>125</sup> Cinematograph film or sound recording are published, when copies are sold, let or hire or offered for sale or hire to the public, section 1(5) of the Act. See also Dean, *Handbook of South African Copyright Law*, p. 1-19.

world-wide broadband communications networks, commonly referred as the "information superhighway", which allow users around the world to distribute a virtually unlimited range of materials.<sup>127</sup> An overview should be given in the following of the "works" available on the Internet.

#### **4.1.2.1 Literary works**

On the Internet many literary works can be found stored in Net Libraries, databases or Web sites.<sup>128</sup> For example electronic books, which are paperback-size computers, allow the user to download and read them off-line, after plugging it into a telephone outlet and selecting books from a prepaid subscription list.<sup>129</sup> Generally works can be fed on the Internet using an optical scanner or document image processor or simply by typing it in.<sup>130</sup> Under the South African Act, literary works are protected in section 2(1)(a) of the Act. A "literary work" includes for example, novels, dramatic works, textbooks, encyclopaedias, letters, lectures and tables and compilations.<sup>131</sup>

#### **4.1.2.2 Musical works**

Musical works are protected by copyright under section 2(1)(b) of the Act. Music can be fed into a computer or composed by computers, for example Techno, Trance or Ambient. A musical work must be a "work consisting of music, exclusive of any words or action intended to be sung, spoken or performed with the music".<sup>132</sup> Individual problems can be seen in context with sound larceny, digital sampling and audio streaming. In the U.S.A. an advance copy of the first single from a famous musician's new album was

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<sup>126</sup> Section 1(5)(a) of the Act.

<sup>127</sup> Smith, *Internet Law and Regulation*, p. 5 and 11.

<sup>128</sup> Pistorius/Visser, *The Copyright Amendment Act 125 of 1992 and Computer Programs: A Preliminary Overview*, p. 351.

<sup>129</sup> A US publishing firm (SoftBook Press) launched the world's first electronic book in September 1998. The electronic book can store up to 100.000 pages.

<sup>130</sup> Dreier, *Copyright Law and Digital Exploitation of Works*, p. 8.

<sup>131</sup> Section 1(1) sv "literary works" (a)-(g) of the Act.

released to several foreign radio stations.<sup>133</sup> Within days, unauthorised copies were placed on Web sites allowing anyone with Internet access to download a copy weeks before authorised copies would be available for sale.<sup>134</sup>

#### **4.1.2.3 Artistic works**

In the meantime the first online galleries inaugurated on the Internet containing different examples of artistic works.<sup>135</sup> The galleries are hosted by the artists itself or on commercial servers, such as the virtual gallery of Cartier. The artists are often using the new technical digital facilities to create a new form of art. Under the Act, an "artistic work" means:

- (i) paintings, sculptures, drawings, engravings and photographs;
- (ii) works of architecture, being either buildings or models of buildings; or
- (iii) works of craftsmanship being neither of the above,

irrespective of the artistic quality thereof.<sup>136</sup> Protected is the visual representation of the idea or the result of an intellectual effort, however, in a material form.<sup>137</sup> This is hardly compatible with an artistic work created by a computer and only visible onscreen. The Act should consider the new form of expression of the Internet in this sphere. The possibilities of the new technology allows to create, for example, three dimensional colour-changing sculptures rotating in front of different landscapes that are changing every two seconds. The law can also not give an answer to the question where the line

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<sup>132</sup> Section 1(1) sv "musical work" of the Act.

<sup>133</sup> Schwimmer/Mende, *Madonna and Audio Streaming*, p. 1.

<sup>134</sup> Sounds can be played on the computer as a AIFF, WAV or MIDI data similar to a recorder or a CD player (if a soundcard is available). For example, the theme tune of the X-files TV series can be heard under [http://www.sanet.de/xf/x\\_files.mid](http://www.sanet.de/xf/x_files.mid) (visited December 1998).

<sup>135</sup> Olia Lialina (Moscow) created the first online gallery; available at <http://art.teleportacia.org> (visited March 1999).

<sup>136</sup> Section 1(1) sv "artistic work" of the Act.

<sup>137</sup> Dean, *Handbook of the South African Copyright Law*, p. 1-9; see also the definitions in section 1(1) of the Act and Smith, *Copyright Companion*, p. 61.

to art is drawn. The Act, however, should provide a protection for "artistic works in digital form".

Regarding the artistic works listed in the definition of section 1 of the Act, section 6(d) and (e) of the Act provides that an artistic work is infringed by including it in a cinematograph or in a television broadcast or transmitting the work in a diffusion service. This provision is intended to ensure that the copyright owner is not deprived of his right to income in the field of visual arts.<sup>138</sup> This protection may be guaranteed on the Internet as well, for example if an artistic work is made visual on a Web site.

With regard to photographic works on the Internet, photographs are available, for instance at the world-largest online photographic archives, now owned by Microsoft. The idea is not only to offer photographs on-screen, or for printout, but also to use the photographs or paintings on a digital screen on the wall, just like traditional pictures.

It is questionable whether a digitised photographic work is directly comparable with a traditional "physical" photographic work in its original meaning. A "photograph" within the meaning of the Act means "any product of photography or of any process analogous to photography, but does not include any part of a cinematograph work."<sup>139</sup> A photographic work is produced by a source of radiation through chemical change on a layer sensitive for radiation. This process is hardly compatible with the making of a digitised photograph. Digital cameras, for example, record images onto a Charged-Coupled Device (CCD), which is made up of thousands of tiny light-sensitive sensors.<sup>140</sup> Each of these represents a single element or pixel in the image. The Act should therefore clarify in the definitions of section 1 of the Act that a "photograph" means any product of photography or of any process analogous to photography *including digitisation*".

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<sup>138</sup> Smith, *Copyright Companion*, p. 63.

<sup>139</sup> Section 1(1) sv "photograph" of the Act.

<sup>140</sup> Cape Argus, September 2, 1998, p. 8.

The digitisation revolutionised the traditional possibilities of adapting photographs. Persons, for example, can be removed or arrangements can be added without being recognisable. On the one hand this might be a great support for the artistic work but on the other hand, it offers multiple possibilities to adapt a work, which can infringe the copyright owner's right to make an adaptation of the work.<sup>141</sup>

#### **4.1.2.4 Cinematographic works**

Cinematograph films are protected in section 2(1)(d) of the Act. A "cinematograph film" means "the fixation by any means whatsoever on film or any other material of a sequence of images capable, when used in conjunction with any mechanical, electronic or other device, of being as a moving picture and of reproduction, and includes the sounds embodied in a sound-track associated with the film but shall not include a computer program".<sup>142</sup> The development of computer technology offers new possibilities to cinematographic works. For example the dinosaurs in *Jurassic Park* were images created on a computer and combined with film images of human actors. Computer can recreate even human actors. For example the movie *The Crow* was completed using images of the actor created by digital manipulation of existing footage, after the actor was accidentally killed during the shooting.<sup>143</sup> Likewise movies are already exclusively animated by computers, such as *Toy story* or *Antz*. The offer of cinematographic works on special servers on the Internet, comparable to video libraries, will be available in the near future, as soon as the transmission rate allows faster transmissions of extensive data.<sup>144</sup>

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<sup>141</sup> Section 7(e) of the Act.

<sup>142</sup> Section 1(1) sv "cinematographic film" of the Act. If sounds accompany the film, they are to be treated as a part of the film for copyright purposes, but this does not affect any copyright subsisting in the sound track as a sound recording.

<sup>143</sup> Smith, *Internet Law and Regulation*, p. 15.

<sup>144</sup> Smith, *Internet Law and Regulation*, p. 5 and 11.

#### **4.1.2.5 Sound recordings**

Sound recordings are protected under section 2(1)(e) of the Act and are defined as being "any fixation of sounds capable of being reproduced, but does not include a sound-track associated with a cinematograph film".<sup>145</sup> It does not matter on what medium the recording is made or by what method the sounds are reproduced, mainly, the sound must be reduced to some material form and fixed in some manner.<sup>146</sup> A sound recording is the actual record, tape or CD, not, for instance, the musical work that is embodied in the medium (record).<sup>147</sup> Thus, if sounds are reproducible, for example as part of a Web page, it will embody a sound recording, and that recording will have a copyright in its own right, regardless of whether or not the sounds themselves are a reproduction of another copyright work.<sup>148</sup> The owner of a sound recording is the person by whom the arrangements for the making of the sound recording were made.<sup>149</sup>

#### **4.1.2.6 Computer programs**

In the Copyright Act of 1978 a computer program was previously protected as a "literary work" or "cinematograph film".<sup>150</sup> Since the Copyright Amendment Act of 1992 computer programs are protected as a separate work in section 2(1)(i) of the Act. Accordingly, the term "computer program" is defined legislatively as "a set of instructions fixed or stored in any matter and which, when used directly or indirectly in a computer, directs its operations to bring about a result".<sup>151</sup> Works, which do not fall within the definition of "computer program", are still capable of being protected as literary works.<sup>152</sup> Especially

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<sup>145</sup> Section 1(1) sv "sound recording" of the Act.

<sup>146</sup> Sections 2(2) and 1(1) of the Act; see also Smith, *Copyright Companion*, p. 71.

<sup>147</sup> Dean, *Handbook of South African Copyright Law*, p. 1-10.

<sup>148</sup> The WPPT is the first to apply to digital transmission of sound recording. Under article 2 (c) of the WPPT, "fixation" means the embodiment of sounds, or of the representations thereof, from which they can be perceived, reproduced or communicated through a device;".

<sup>149</sup> Section 1(1) sv "author" (c) of the Act.

<sup>150</sup> See section 1(1) (definitions) of the Act; Merwe, *Computers and Intellectual Property Law*, p. 5.

<sup>151</sup> Section 1(1) sv "computer program" of the Act.

<sup>152</sup> Dean, *Handbook of South African Copyright Law*, Ch 1, p. 13. This continued relationship,

software, which is placed on the Internet, faces the risk of infringement. Even software vendors that choose to distribute software products through the Internet can find themselves victims of infringement. For example, id Software Inc., which developed the popular computer games Quake and Doom, estimates that 50 percent of the full versions of Quake now being played are unlicensed, having been downloaded from pirate Web sites.<sup>153</sup> Thus, even software vendors which continue to rely on conventional delivery methods using disk, CD-ROM and, in some cases, direct point-to-point electronic distribution through a secure connection are increasingly exposed to the risks of Internet privacy.<sup>154</sup>

Internationally, the TRIPS-Agreement and the WIPO Copyright Treaty (WCT) provide protection of computer programs.<sup>155</sup> The WCT expressly extends copyright protection to computer programs in all forms as literary works.<sup>156</sup> Article 4 of the WCT is consistent with article 2(1) of the Berne Convention: "The expression 'literary and artistic work' shall include every production in the literary, scientific and artistic domain, whatever may be the mode or form of its expression".

#### **4.1.2.7 Web sites**

The categorisation of a Web site as a work protected under the Act is not clear. The difficulty, which may arise, is the multimedia nature of the Web site. Web sites contain, at least in most of the cases, accumulations of texts, graphics, images and, sometimes, sounds. All these contents may be

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instead of completely separating literary works and computer programs, was criticised by Pistorius/Visser, *The Copyright Amendment Act 125 of 1992 and Computer Programs: A Preliminary Overview*, p. 348.

<sup>153</sup> Lawrence/Lobsenz, *Software on the Internet Invites Piracy*, p. 1.

<sup>154</sup> Lawrence/Lobsenz, *Software on the Internet Invites Piracy*, p. 1.

<sup>155</sup> Article 10(1) of the TRIPS Agreement reads as follows: "Computer programs, whether in source or object code shall be protected as literary works under the Berne Convention." This protection does not extend to the data or material itself and nor will it affect the copyright subsisting on material used therein.

<sup>156</sup> Article 4 of the WCT reads as follows: "Computer programs are protected as literary works within the meaning of Article 2 of the Berne Convention. Such protection applies to computer programs, whatever may be the mode or form of their expression."

individually eligible for copyright as literary, musical or artistic works under section 2(1)(a), (b) or (c) of the Act.

Besides the individual elements of content, a Web sites must be classified as a whole.<sup>157</sup> Web sites are carefully created products concerning the arrangement of the elements contained. Like business cards they are used and designed to represent their owner. Hence, they are products of intellectual activity and should itself also be eligible for copyright. The question is, however, under which category of work a Web site may be categorised. Generally, the digital medium in which all works on the Internet are basically expressed means that distinction on form is hard to apply. But there is no reason that the format or the physical support should affect the nature or category of the work.<sup>158</sup> There has been a tendency to confuse the work, the format and the way in which digital information is stored and transmitted.<sup>159</sup> Lord Hamilton in the *Shetland Times* case<sup>160</sup> assumed the action of copying a Web site to be a cable programme service under section 7 of the British Copyright, Designs and Patents Act of 1988.<sup>161</sup> Regardless of the fact that this finding attracted lots of well founded criticism, the South African Copyright Act does not provide a similar category of works. A concrete categorisation as a work is advisable, because the content and scope of the rights of the author depend on the category the works belongs to.<sup>162</sup> In any case, new legislation should clarify that a work can consist of the combination or merging of works, which are already independently protected by copyright.

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<sup>157</sup> Koch, *Rechte an Webseiten* (Protection of Web sites), p. 298.

<sup>158</sup> Schurtz-Taylor, *The Internet Experience and Author's Rights*, p. 123.

<sup>159</sup> Schurtz-Taylor, *The Internet Experience and Author's Rights*, p. 123.

<sup>160</sup> *Shetland Times Ltd v Dr. Jonathan Wills and Zetnews Ltd*, at [http://www.carltons-  
dunde.co.uk/features/shetland.htm](http://www.carltons-<br/>dunde.co.uk/features/shetland.htm) (last visited April 1999).

<sup>161</sup> Under this Act a cable programme service is a service which consists wholly or mainly in sending visual images, sounds or other information by means of a telecommunications system, otherwise than by wireless telegraphy, for reception: (a) at two or more places (whether for simultaneous reception or at different times in response to requests by different users), or (b) for presentation to members of the public and which are not subject to an exception. See Smith, *Internet Law and Regulation*, p. 23 and 24 and MacQueen, *Copyright and the Internet*, p. 74.

<sup>162</sup> Sections 6-11B of the Act.

(a) Literary work

A Web site could be considered a literary work.<sup>163</sup> This applies particularly to those cases in which written works like newspapers or books are published on the Web. However, Web sites usually contain more than just written works. Nearly all include graphics, images and some even sounds.<sup>164</sup> Since the written content of a site is protected individually, as explained above, for the purpose of categorising a Web site it appears to be more important to find a category that comprises all sites offered on the Web, not only those that consist mainly of literary works.

(b) Artistic work

Web sites are often designed with considerable artistic care and might therefore be considered an artistic work.<sup>165</sup> This would require that the arrangement of the Web site is original.<sup>166</sup> Regardless of its artistic skill and effort, however, a Web site is hardly compatible with the definition of an "artistic work" of section 1 of the Act, because the definition apparently is dealing with the creation of material forms. Thus, as long as the definition of an artistic work does not consider "works created by a computer", a Web site can not be protected as an artistic work.

(c) Cinematograph film

A Web site contains usually several Web pages that are linked together. If a user visits all these pages by permanently clicking, for example, the "next page" button, the appearing pages may be compared with a cinematograph film. A cinematograph film is defined as the "fixation by any means whatsoever on film or any other material of a sequence of images capable".<sup>167</sup> However, a Web site does not work in sequence and therefore, if a Web sites

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<sup>163</sup> Section 2(1)(a) of the Act.

<sup>164</sup> Koch, *Rechte an Webseiten* (Protection of Web sites), p. 298.

<sup>165</sup> Section 2(1)(c) of the Act.

<sup>166</sup> Section 2 of the Act.

contains several pages which can be made visible on-screen one after another, it is not comparable to a cinematograph film.

(d) Published edition

Another category of works that might be considered is that of a "published edition" under section 2(1)(h) of the Act. It is defined as "the first print by whatever process of a particular typographical arrangement of a literary or musical work".<sup>168</sup> In essence this category of works amounts to the typographical arrangements featured on the page of a book or on other material.<sup>169</sup> Indeed, a Web site might be considered as the cover of a book or a CD in those cases where it contains written works or sounds. However, Web sites may neither embody literary nor musical works. Since the definition of a published edition requires the inclusion of only these categories of works, this would not apply to all sites on the Web. As in the case of literary works, categorising a Web site as a "published edition" would not be satisfactory because it does not comprise all sites offered on the Web.<sup>170</sup>

(e) Computer program

All Web pages are built up on a Hypertext Markup Language (HTML) data file, which contains the instructions for the browser with regard to the optical arrangement of the Web site's content.<sup>171</sup> Besides their individual content a Web site may separately be protected as a "computer program". A "computer program" means, "a set of instructions fixed or stored in any manner and which, when used directly or indirectly in a computer, directs its operation to bring about a result".<sup>172</sup> This would in general be the source code, but with

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<sup>167</sup> Section 1(1) sv "cinematograph film" of the Act.

<sup>168</sup> Section 1(1) sv "published edition" of the Act.

<sup>169</sup> Dean, *Handbook of South African Copyright Law*, p. 1-12.

<sup>170</sup> To another conclusion comes MacQueen, *Copyright and the Internet*, p. 75, who assumes that Web pages are typically arranged of literary, dramatic or musical works.

<sup>171</sup> Jakab, *Facts and Law of Web Linking*, p. 6; Smith, *Internet Law and Regulation*, p. 22.

<sup>172</sup> Section 1(1) sv "computer program" of the Act.

modern generation computers, much of the source code for a computer can itself be computer-generated.<sup>173</sup>

As described above, a Web site is a software program written in a high-level computer language, the HTML code.<sup>174</sup> This code, also known as the source code, is read and interpreted by another software program, the browser's software, that is loaded onto the user's computer. When the browser contacts an URL address and receives the requested document, the HTML file contains certain instructions for the browser's software concerning the arrangement of texts, graphics, etc.<sup>175</sup> Without these instructions the browser would not be able to display the page accordingly. Hence, when the HTML file, which is a set of fixed and stored instructions, is used in a computer, it directs its operation to bring about a certain result. This is comparable to the definition of a computer program in section 1(1) of the Act.

In the United Kingdom, for instance, as well as in many other member states of the Berne Convention, computer programs are protected as literary works under section 3(1) of the U.K. Copyright, Designs and Patents Act. This Act does not provide an express definition for the term "computer program". In general terms it is said to be a series of coded instructions which are intended to bring about a particular result when used in a computer. According to this definition, which is indeed similar to the South African legal definition, authors agreed upon that a Web site might be categorised as a computer program.<sup>176</sup>

In the United States the question of categorisation did not receive lots of attention because the U.S. Copyright Act does not exhaustively protect certain kinds of works but rather offers protection for every product of intellectual activity provided it is original and fixed in a tangible medium of expression.<sup>177</sup>

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<sup>173</sup> Smith, *Copyright Companion*, p. 82.

<sup>174</sup> Smith, *Internet Law and Regulation*, p. 22. More complex pages making use of Java applets or with sections written in languages such as JavaScript (Java applets are mini-programs delivered to the user's computer when the Web site is accessed).

<sup>175</sup> Jakab, *Facts and Law of Web Linking*, p. 6; Smith, *Internet Law and Regulation*, p. 22.

<sup>176</sup> MacQueen, *Copyright and the Internet*, p. 73 and 74; Smith, *Internet Law and Regulation*, p. 18 and 22.

<sup>177</sup> 17 U.S.C. 102.

A categorisation of works is therefore not necessary in the United States. However, regarding the definition of a "computer program" as "a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result"<sup>178</sup> most authors also argue in favour of a categorisation of material published on the Internet thereunder.

Generally, the underlying HTML files of each Web site can be reduced to a binary series of 0's and 1's, which is one of the most significant characteristics of digitisation. Computer software is held to be the vehicle carrying other material.<sup>179</sup> It is argued that where a computer program fulfils the function of storing images and being instrumental in creating moving pictures it is a vehicle for carrying a cinematograph film and is essentially the equivalent of a roll or celluloid film and the subject matter so carried is a 'cinematograph film'.<sup>180</sup> This is comparable to a Web site and its HTML code, which is the "vehicle" for its content, such as literary or musical works. Thus, since Web sites are software programs and reduced to a material form as such that the owner can prove their existence, this should satisfy the requirements of section 2(2) of the Act.

#### **4.1.2.8 Hypertextlinks**

The World Wide Web is a composition of millions of Web sites.<sup>181</sup> A Web site itself consists of one or more interconnected "pages" (Web pages), typically organised from a central or "home" page (homepage).<sup>182</sup> The use of hypertextlinks, more commonly known as hyperlinks, or simply links is a method of associating Web pages with each other and is the standard method used. Each Web page, whether the home page or an internal page, has an

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<sup>178</sup> 17 U.S.C. 101.

<sup>179</sup> Dean, *Handbook of South African Copyright Law*, p. 1-14. See also *Nintendo Co Ltd v Golden China TV-Game Centre & others*, 1995 (1) SA 229 (T) and *Golden China TV-Game Centre & others v Nintendo Co Ltd*, 1997 (1) SA 405 (A).

<sup>180</sup> Dean, *Handbook of South African Copyright Law*, p. 1-14. Under section 1(1)(a)(c) of the Act a computer program is expressly excluded being a cinematograph film.

<sup>181</sup> Number of Web sites in 06/1993: 130, in 09/1996: 397,281 and in 04/1998: 2,215,195.

<sup>182</sup> Beal, *The Potential Liability of linking on the Internet: An Examination of Possible Legal*

address or so-called Uniform Resource Locator (URL) that identifies its Web location to users.<sup>183</sup> The URL functions like a phone number; if a user knows the URL of a site he or she would like to visit, he or she can easily type it in and access the site directly. A link is nothing else but the specification of a Uniform Resource Locator (URL).<sup>184</sup> Instead of typing in the URL, a user simply clicks on the link, and the browser will access the linked-to Web page using the required protocol, fetch it and display it on the user's screen.<sup>185</sup> Links can be found on many Web sites, thus it is interesting to determine whether the display of a foreign URL address does infringe on copyright. This depends in the first place on whether a URL address is protected as a "work" under the Copyright Act.<sup>186</sup> One may argue that it constitutes a literary work according to section 2(1)(a) of the Act. Literary works include a wide range of written works, irrespective of literary quality and in whatever mode or form expressed.<sup>187</sup> With regard to this definition the term "literary work" was criticised as something of a misnomer and it has been suggested to use a description as "written works", because this would convey a more accurate impression.<sup>188</sup> In fact, the term "literary works" comprises any combination of letters and/or numerals whereby the main consideration has to be the amount of skill and effort that went into its creation rather than the literary merit thereof.<sup>189</sup>

Whether this definition implies that URL addresses are eligible for copyright is questionable. On the one hand, they are mere indicators of location such as street names, telephone numbers or a footnote in a book that refers to another source of information. On the other hand, contrary to these conventional references, Web site providers may choose their domain names. Many companies indeed invest skill and effort to create domain names as such they are easy to remember and creative, too. However, the majority of

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*Solutions*, p. 709.

<sup>183</sup> For example the metasite Yahoo! can be found at <http://www.yahoo.com> (visited June 1999).

<sup>184</sup> Smith, *Internet Law and Regulation*, p. 25.

<sup>185</sup> Smith, *Internet Law and Regulation*, p. 22.

<sup>186</sup> The Uniform Resource Locator (URL) is the address of a Web site on the Internet.

<sup>187</sup> See section 1(1) sv "literary works" of the Act.

<sup>188</sup> Dean, *Handbook of the South African Copyright Law*, p. 1-6.

<sup>189</sup> Dean, *Handbook of the South African Copyright Law*, p. 1-6.

domain names simply reproduce their company or organisation name in their domain name.<sup>190</sup> In the cases of invented names that do not contain any literary content, South African courts have decided that there is no copyright protection.<sup>191</sup> It is therefore unlikely that copyright liability would arise for presenting a hypertext link that merely recites a URL.<sup>192</sup> A hypertextlink, however, if a logo or other proprietary image indicates it, could be protected under the Trademark Act.<sup>193</sup>

As stated above, a link is comparable to a footnote in a book that refers to another source of information. Under section 12(6)(b) of the Act it is stated that the "author of a lecture, address or other work referred to in paragraph (a) shall have the exclusive right of making a collection thereof." Thus, a collection of links could be protected under the Act.

The Web is composed of two main types of sites: information providers and metasites or compilers.<sup>194</sup> An information provider typically displays meaningful, original content, which may be occasionally updated.<sup>195</sup> Metasites include Web search engines,<sup>196</sup> and catalogues of sites of a particular, narrow interest.<sup>197</sup> On both types of sites, collection of links can be found. These links are fundamental to the functioning of the Web, as they allow users to access Web sites without knowing the specific URL of that site.<sup>198</sup>

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<sup>190</sup> For example Microsoft is present on the Internet under <http://www.microsoft.com> (last visited June 1999).

<sup>191</sup> *Kinnor (Pty) Ltd v Finkel*, 352 JOC at 361 with reference to *Exxon Corporation v Exxon Insurance Consultants Ltd*, 1982 RPC 69.

<sup>192</sup> Raysman/Brown, *Dangerous Liaisons: The Legal Risks of Linking Web sites*, p. 3; Beal, *The Potential Liability of linking on the Internet: An Examination of Possible Legal Solutions*, p. 725.

<sup>193</sup> Beal, *The Potential Liability of linking on the Internet: An Examination of Possible Legal Solutions*, p. 712.

<sup>194</sup> Beal, *The Potential Liability of linking on the Internet: An Examination of Possible Legal Solutions*, p. 709.

<sup>195</sup> For example the U.S. bookseller Amazon, at <http://www.amazon.com> (visited June 1999), or the Capetown/SA radio station 5FM, at <http://www.powerzone.co.za> (visited July 1999).

<sup>196</sup> Search engines can be found, for example, on the Web site of Yahoo! (at <http://www.yahoo.com>) or Findlaw (at <http://www.findlaw.com>) (both visited July 1999).

<sup>197</sup> Beal, *The Potential Liability of linking on the Internet: An Examination of Possible Legal Solutions*, p. 709.

<sup>198</sup> Beal, *The Potential Liability of linking on the Internet: An Examination of Possible Legal Solutions*, p. 710.

(a) Collection of Links on Private or Commercial Web sites

On private or commercial Web sites a collection of links may contain a personal selection of links targeting to different information about a specific topic. A travel agency, for example, might provide a selection of links to different Web cams in the world,<sup>199</sup> or a fan-site of a famous music group provides several links targeting similar sites. This collection of links is nothing else than the collection of Internet related addresses, comparable to a private telephone or address book, but with the difference that the addresses are not listed accidental, but comply with a special interest. A collection of links is therefore more comparable to, for example, a bibliography of a writer. Works such as tables and compilation can hardly be seen as works having significant literary merit, however, copyright may subsist in a literary work irrespective of its literary quality.<sup>200</sup> Regarding a collection of links, the "value" of its creation must be seen in their individual selection or arrangement of its content. If the Web site owner arranges an individual and extensive index of links, which required an intellectual effort to collect and display the links, the collection, might be protected under the Act as a compilation, hence a literary work. Otherwise a collection of links is not capable of being protected by copyright as they are a selection of broadly available information in the public domain and thus not original.

(b) Collection of Links on Metasites

Generally more extensive are collection of links provided on metasites as a result of a specific search for material. Due to the fact that information on the Internet are widespread and extensive, without a metasite it would be impossible for a user to search all the existing sites with regard to his request. Therefore metasites act as "signposts to quality information".<sup>201</sup> Besides a general selection of links targeting to different topics, they are offering the

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<sup>199</sup> See, for example, Capetown's Webcam at [http://www.24.com/Travel/camera\\_site/camera.asp](http://www.24.com/Travel/camera_site/camera.asp) (visited Mar. 1999).

<sup>200</sup> Smith, *Copyright Companion*, p. 48.

<sup>201</sup> Smith, *Internet Law and Regulation*, p. 10.

service of so-called search engines. Search engines function to organise information on the Web and help users locate information. Like any typical computerised searching mechanism, a user types a keyword in query into the search engine. Each search engine then search for material on the Web by use of a specific kind of software programs, usually called a "spider" or "crawler". These programs temporarily copy such material, and create a full-text index of the material providing a list of links to related Web sites. What appears onscreen is the index of the links connected to the database of information stored on the server.<sup>202</sup>

A database is not protected separately under the Act. However, a computer database is nothing else than a compilation of the works or other materials stored in it.<sup>203</sup> The only difference between a computer database and other compilation is that the traditional compilation exists in paper form, while the computer database is in electronic form. The most appropriate category for the copyright protection of a collection of links under the Act is therefore a compilation, and hence a literary work.<sup>204</sup> However, this classification raises a few questions.

First, the fact that computer programs have been excluded from the category of literary works has placed the copyright protection of computer databases in doubt. On the one side it is argued, that a computer database, which would include a collection of links, stored or embodied in a computer or a medium used in conjunction with a computer would generally be a compilation and capable of protection as a literary work.<sup>205</sup> On the other side it is argued, that since the amendment of the Act in 1992, computer-based compilations can no longer be protected as a compilation, hence a literary work, because "an

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<sup>202</sup> Beal, *The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solutions*, p. 709.

<sup>203</sup> Pistorius/Visser, *The Copyright Amendment Act 125 of 1992 and Computer Programs: A Preliminary Overview*, p. 352.

<sup>204</sup> See the definition of the Amendment in 1992 in section 1(1) of the Act: A "literary work" includes "(g) tables and compilations, including tables and compilations of data stored or embodied in a computer or a medium used in conjunction with a computer".

<sup>205</sup> Dean, *Handbook of South African Copyright Law*, p. 1-14. This opinion correspond to the interpretation of computer databases in the United Kingdom, see Garnett & other, in Copinger and Skone James on Copyright, p. 2-8.

integral and important part of the database is comprised of command procedures that are capable of copyright protection as a computer program".<sup>206</sup> A computer program is expressly not included in the definition of a literary work.<sup>207</sup>

Second, the copyright in the compilation is separate and distinct from the copyright that may exist in the collected materials. With the compilation, copyright protects the original skill and effort expended in selecting and arranging the material. However, one could argue, that the creation of the index of links with a search engine is mere technical and therefore not original.

Third, a further problem might be seen in the authorship, because the created collection of links seems to be created in a form of joint authorship. First, there is the user who specifies the topic by typing in one or more keywords. Second there is the software program, i.e. the person who exercises control over the making of the computer program,<sup>208</sup> that finally creates the collection of links based on the query of the user.

The European Community Directive of Databases now provides an answer to those questions. Under the EC Database Directive a database is defined as a "collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means".<sup>209</sup> This will include non-computer databases, online databases and CD-ROMS. The directive offers two means of database protection: copyright and a *sui generis* right in article 7 of the EC Database Directive.

According to article 3(1) of the EC Database Directive, databases which "by reason of the selection or arrangement of their contents, constitute the author's own intellectual creation shall be protected as such by copyright".

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<sup>206</sup> Pistorius/Visser, *The Copyright Amendment Act 125 of 1992 and Computer Programs: A Preliminary Overview*, p. 353.

<sup>207</sup> Section 1(1) sv "literary work" of the Act.

<sup>208</sup> Section 1(1) sv "author" (i) of the Act.

<sup>209</sup> Article 1(2) of the EC Database Directive.

The requisite level of originality of copyright is quite low. Original selection or arrangement of the contents is sufficient.<sup>210</sup> The author of a database has the exclusive right to carry out or authorise reproduction, translation, adaptation, arrangement, distribution or communication to the public.<sup>211</sup> This protection is not extended to their contents and does not affect existing copyright on the contents.

The *sui generis* right, also called an extraction right, is based on a "qualitative and quantitative investment" and is provided irrespective of whether the database meets the conditions for subsistence in copyright.<sup>212</sup> Most database applications involve huge costs of creating, storing and up-dating. For example the databases created by search engines are not original, but expensive in its development. For a competitor it is extremely cheap and simple to copy the database and sell it into the existing market. The *sui generis* right is the right to prevent the unauthorised extraction and/or re-utilisation of all or a substantial part of the database.<sup>213</sup> The beneficiaries of the *sui generis* right are the makers of or the rightholders in databases. The computer programs employed in the database are protected by the Council Directive on the legal protection of computer programs.

Furthermore regarding international protection, collections of links are protected as compilation of data (databases) under article 5 of the WIPO Copyright Treaty.<sup>214</sup> The protection is granted if a compilation of data or other material, in any form, which by reason of the selection or arrangement of their contents constitute intellectual creations.<sup>215</sup>

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<sup>210</sup> Garnett & others, in Copinger and Skone James on Copyright, 8-31 and 8-46.

<sup>211</sup> Article 5 of the DD.

<sup>212</sup> Garnett & others, in Copinger and Skone James on Copyright, 8-46.

<sup>213</sup> Extraction is the permanent or temporary transfer of all or substantial parts of the contents of the database. Reutilization is any form of making the database or substantial parts thereof available to the public through the distribution of copies, by renting, or by online or other forms of transmission.

<sup>214</sup> See also article 2(5) of the Berne Convention which reads as follows: "Collections of literary or artistic works such as encyclopaedias and anthologies which, by reason of the selection and arrangement of their contents, constitute intellectual creations shall be protected as such, without prejudice to the copyright in each of the works forming part of such collections." Article 5 of the WCT confirms the applicability of this language to databases.

<sup>215</sup> This protection does not extend to the data or the material itself and is without prejudice to any

### (c) Proposal for a Solution

The separation of literary works and computer programs create some uncertainty in the classification of the new works on the Internet. Although a complete separation of literary works and computer programs is suggested,<sup>216</sup> however, it is difficult to draw a similar precise line in the world of the Internet. Digitisation blurred the traditional form of a work with which the Act has to deal with. Nowadays on the Internet, the works seems to merge more and more with each other, and what appears as a new work, might be a combination of three different works. Digitisation does not make everything new, but different. The law is therefore at least forced to follow, and if possible, to be a step in advance. A database is the combination of a computer program and a compilation. A collection of links in its expressed form appears to be a compilation. The result on the computer screen, or what is stored on the provider's computer, is what we usually find as a compilation in books. The computer software that commands the database, is a second work, which also can be protected by copyright. However, the mere fact that the collection of links is stored in electronically form does not render it a computer program. Thus, as long as the Act does not provide a separate category for databases, such as collections of links, they should be categorised as a compilation, hence a literary work, unless the Act provides a separate protection for databases including a *sui generis right*, comparable to the *sui generis right* provided in the EC Database Directive. However, it remains difficult to classify a collection of links as a compilation under the Act, because the Act traditionally dealt with compilations represented in their material expression.<sup>217</sup>

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copyright subsisting in the data or material contained in the compilation, article 5 WCT.

<sup>216</sup> Pistorius/Visser, *The Copyright Amendment Act 125 of 1992 and Computer Programs: A Preliminary Overview*, p. 348.

<sup>217</sup> Pistorius/Visser, *The Copyright Amendment Act 125 of 1992 and Computer Programs: A Preliminary Overview*, p. 353, with reference to *Econostat (Pty) Ltd v Burkhard Karl Hans Lambrecht & another* (WLD 16 May 1983 (case no 19592/81)).

#### **4.1.2.9 E-mails and Contributions in Mailinglists or Newsgroups**

In principle, copyright law can also protect e-mails or contributions in mailinglists or newsgroups, as long as they can be categorised as a "work" within the meaning of the Act. An e-mail usually can be classified as a letter,<sup>218</sup> report,<sup>219</sup> or even a poetical work,<sup>220</sup> depending on its content. E-mails generally might be protected as a literary work.<sup>221</sup> A multitude of contributions (so-called threads) in mailing lists or newsgroups might be classified as a compilation.<sup>222</sup> However, it is questionable if these collections meet the requirements of being original, because in particular a special arrangement or a special selection is missing. On the contrary, a "moderated" newsgroup or mailinglist could meet the requirement of being original, because articles are not only accidentally published by each Internet user.<sup>223</sup> A so-called moderator first checks the content, if the article or message has acceptable content and tone of the discussion taking place.<sup>224</sup> He is responsible for the selection of the content, but he has no influence in the arrangement of the articles. In this connection, the moderator could be seen as an author of a compilation.<sup>225</sup> A single thread of a moderated newsgroup or mailing list could therefore be protected by copyright.

A question to be answered in this connection is to what extent the recipient of an e-mail or the reader of a contribution may re-use them? This happens, for example, if a user takes part in a discussion in a newsgroup and uses a previous contribution of another user or parts of it for his own response (so-called *follow up*). Similar to this, a further example would be, when a user receives an e-mail and he sends the same content to an acquaintance (so-called *forwarding*).

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<sup>218</sup> Section 1(1) sv "literary work" (e) of the Act.

<sup>219</sup> Section 1(1) sv "literary work" (e) of the Act.

<sup>220</sup> Section 1(1) sv "literary work" (a) of the Act.

<sup>221</sup> Section 2(1)(a) of the Act.

<sup>222</sup> Section 1(1) sv "literary work" (g) of the Act.

<sup>223</sup> Terrett, *A Lawyer's Introduction to the Internet*, p. 4.

<sup>224</sup> Terrett, *A Lawyer's Introduction to the Internet*, p. 4.

<sup>225</sup> Section 2(1)(a) of the Act in connection section 1(1) sv "literary work" (g) tables and compilations of the Act.

Subscribers of mailing lists and newsgroups generally share the same interest with regard to a certain topic. Every subscriber who publishes any material in that mailing list or newsgroup might therefore have an interest that his material can be read by as many other subscribers, hence he might have given an implied licence to re-use his material. Otherwise, the copyright of the author would not be infringed by any fair dealing with a work for the purpose of criticism, review or quotation of it.<sup>226</sup> However, under the Act, quotations are only legal, after a work is lawfully available to the public.<sup>227</sup> This might be the case if the author publishes his work in a mailing list or newsgroup, but this will be not the case when a user publishes a private e-mail in a newsgroup or mailing list, which he received without authorisation of the author.

#### **4.2 Applying Copyright to the Internet**

This part of the dissertation discusses the various rights of the copyright holder, such as the right of reproduction, the right of public performance, the right of broadcasting, the right of causing the work to be transmitted in a diffusion service, the right of importation and the right of distribution, that may be implicated by the transmission and use of works on the Internet. Activities on the Internet potentially fall within a variety of infringement provisions. Some activities throw into clear relief the problems of classification caused by the historic roots of copyright in tangible media. Some examples of these will be considered individually. The South African copyright law provides for two types of copyright infringement, direct or primary infringement and indirect or secondary infringement. First, the potentially acts of direct or primary infringement will be examined.

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<sup>226</sup> Section 12(1)(b) of the Act, provided that the source shall be mentioned, as well as the name of the author, and section 12(3) of the Act.

## 4.2.1 Direct or Primary Infringement

Direct or primary infringement of the copyright takes place when a person, without the authority of the copyright owner, does or causes someone else to do any of the acts which are in respect of the work designated as restricted acts and therefore are in the monopoly of the copyright owner.<sup>228</sup> A crucial characteristic of the direct or primary infringement is that there is liability even though the infringer is unaware at the time of acting that he is infringing copyright.<sup>229</sup> This becomes especially significant regarding the cases when a user browses in good faith through the Internet, but "copies" several works in his computer's RAM.

### 4.2.1.1 Reproduction Right

The single most important copyright implicated by the transmission and use of the works on the Internet is the right of reproduction. Although there are no "original" works available on the Internet, but generally copies of the original work or copies of copies, copyright protection is also granted against infringing acts, which are not resulting from the direct copying of the work.<sup>230</sup> However, as described above, copyright traditionally dealt with the use of a single item, even computer programs had to be "fixed or stored in any manner" to be eligible for copyright protection.<sup>231</sup> The copyright law was therefore designed to deal primarily with the creation, distribution and sale of protected works in tangible copies. For example, a book was printed at the printing office, then delivered to the bookseller, where a customer finally bought it. Now in the digital era of the Internet, the traditional tangible form of a work does not exist anymore.

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<sup>227</sup> Section 12(3) of the Act.

<sup>228</sup> Copeling, *Copyright*, p. 21. For the different acts see sections 23(1) and 6 - 11B of the Act.

<sup>229</sup> Dean, *Handbook of the South African Copyright Law*, p. 1-43.

<sup>230</sup> In terms of section 1(1) sv "reproduction" (c) of the Act, a reproduction of any work includes a reproduction made from a reproduction of that work. See also Smith, *Copyright Companion*, p. 20 with reference to *Tolima (Pty) Ltd v Cugacius Motor Accessories (Pty) Ltd* 1983 3 SA 504 (W).

<sup>231</sup> Section 1(1) sv "computer program" of the Act.

On the Internet, works are transmitted and stored in a digital format, which is not direct perceptible to the human mind. Under the Act a work shall not be eligible for copyright unless the work has been reduced to material form.<sup>232</sup> It is not necessary for a reproduction to be in a tangible form or the same form as the original.<sup>233</sup> As described above, reproductions may take place while storing a work on the hard disk of a user's computer, or as hard copy by way of a printout. However, "copies" on the Internet can also be made because of temporary storage or it can be caused by process during the transmission of the work over the Internet. Until a copyright owner stands upon an exploitation right, it therefore has to be examined if a temporary storage of a work or a reproduction caused by process on the Internet can be seen as a reproduction in material form within the meaning of the Act.<sup>234</sup>

#### (a) Reproduction caused by Process

The nature of the Internet is such that it is often difficult to know precisely whether a copy of a work has been made and, if so, where it resides at any given time within the network. As described further below, information is sent through the Internet using a technology known as packet switching, in which data is broken up into smaller units, or packets, and the packets are sent as discrete units. Before a user receives the data on his server, these packets pass through the RAM of several interim computer nodes on the network. It therefore has to be examined if copies are being reproduced in the meaning of the Act during this transmission.

##### (a)(i) Reproduction on Interim Computers

To illustrate the number of interim copies, in whole or in part, that may be made when transmitting a work through the Internet, consider the example of downloading a picture from a Web site. During the course of such transmission, no less than seven interim copies of the picture may be made:

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<sup>232</sup> Section 2(2) of the Act.

<sup>233</sup> Smith, *Copyright Companion*, p. 20 and 49.

<sup>234</sup> See the sections 6(a), 7(a), 8(a), 10(a) and 11B(a) of the Act.

The modem at the receiving and transmitting computers will buffer each byte of data, as will the router, the receiving computer itself (in the RAM), the Web browser, the video decompression chip, and the video display board. These copies are in addition to the one that may be stored on the recipient computer's hard disc.

Information, such as the work of an author, is not transmitted as a constant stream on the Internet. Instead, it is divided in various data packets and transmitted separately.<sup>235</sup> The transmission is guaranteed by two software protocols. The software protocol TCP (Transmission Control Protocol) is responsible for dividing up the data to be sent into individual packets and allotting sequential numbers to each one.<sup>236</sup> The software protocol IP (Internet Protocol) provides addressing and forwarding of the packets to the remote host. At the point of destination, the TCP protocol is responsible for receiving the data packets and reassembling the data according to the sequential numbers.

Each data communication between two computers is made by a more or less small number of interim computer way-stations known as routers.<sup>237</sup> With the help of routing tables, which are storing the locations of the networks connected to the Internet, the router knows where to send the data packet.<sup>238</sup> As the packets are released and forwarded through the network, each router makes a temporary (ephemeral) copy of each packet and transmits it to the next router according to the best path available at that instant until it arrives at its destination.<sup>239</sup> The packets are then "reassembled" at the receiving end into proper order to reconstruct the data that was sent. Thus, information on the Internet is never transmitted as a whole, instead, only certain packets of the data being transmitted are passing through the RAM of a node computer

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<sup>235</sup> *American Civil Liberties Union v Reno*, 929 F.Supp. 824, 832 (E.D. Pa. 1996). The size of the packets are dependent on the transmitting network, for example Ethernet allows a size of 12 000 bit packets whereas X.25 allows only 1024 bit packets.

<sup>236</sup> By a *Domain Name Server* or *Domain Name System* who converts an address (such as [www.university.co.za](http://www.university.co.za)) into an IP (Internet Protocol) number (such as 194.72.242.3).

<sup>237</sup> Smith, *Internet Law and Regulation*, p. 8.

<sup>238</sup> Routers also constantly scan accessible networks looking for breakage and data traffic jams.

<sup>239</sup> *American Civil Liberties Union v Reno*, 929 F.Supp. 824, 832 (E.D. Pa. 1996).

at any given time. It is first questionable, whether these partial copies can still be seen as a work protected by copyright.

Under South African copyright law, a partial copy of a work is protected in section 1(2A) of the Act. It is not necessary for the work to be reproduced completely. Sufficient is already the reproduction of "any substantial part" of the work, in other words, essential is the quality, not the quantity.<sup>240</sup> However, the individual packets are not divided under consideration of the content. Furthermore the modem at the receiving and transmitting computers may buffer only one or a few bytes of data at a time, or a node computer may receive only a few packets of the total data, while the other packets are being passed through a different route and therefore through a different node computer's RAM. Therefore a single data packet might generally have too little content to be qualified a "substantial part" of the work,<sup>241</sup> although it is conceivable, that a single data packet nevertheless fulfils the conditions for subsistence of copyright in the meaning of the Act. This might be the case when a data packet contains, for example, a short poem, a quotation, and a summary of a scientific work or a recognisable part of a song.<sup>242</sup>

#### (a)(ii) Reproduction on the Cache

Caching is another activity that involves an automatic storage of a work during the use of the Internet, also known as "mirroring".<sup>243</sup> Caching means storing copies of material from an original source site, such as a Web site, onto a storage device (cache) for later use when the same material is requested again.<sup>244</sup> If a user then access one of these Web sites, the Web site has not to be transmitted from the original server again, but directly from the cache.<sup>245</sup>

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<sup>240</sup> Dean, *Handbook of South African Copyright Law*, p. 1-37; Smith, *Copyright Companion*, p. 19.

<sup>241</sup> A "substantial part" of a work is reproduced in the meaning of the Act when the two works are substantially similar and a causal connection exists between the plaintiff's work and the defendant's alleged infringing copy, Dean, *Handbook of South African Copyright Law*, p. 1-41.

<sup>242</sup> See also Smith, *Copyright Companion*, p. 19.

<sup>243</sup> Hayes, *Advanced Copyright Issues on the Internet*, p. 64; Smith, *Internet Law and Regulation*, p.31; see also *Copyright Law on the Internet: The Special Problem of Caching and Copyright Protection*, Cyberspace L. Inst., at <http://www.cli.org/caching.html> (visited Nov. 1998).

<sup>244</sup> Litsey, *Copyright and the Free Flow of Information*, p. 5.

<sup>245</sup> Smith, *Internet Law and Regulation*, p.31.

The need for caching on the Internet stems basically from current transmission bandwidth limitations, which have resulted from at least two causes. First, the number of users has increased enormously unlike the underlying infrastructure necessary to support the increased usage. Second, transmission rates are often low due to ordinary, analogue telephone lines, which were not designed for high-speed transmission of voluminous digital data. The process of caching saves loading time for the end-user and reduces the data flow on the Internet.<sup>246</sup> The cached material is usually stored only temporarily, although the times may vary from a few seconds to a few days, weeks, or more.

The most familiar type of cache to end-users of the Internet is that created by Web browsers.<sup>247</sup> These create caches on the hard disk, RAM, or some combination of both.<sup>248</sup> When the user hits the "back" icon, for example, the browser will usually retrieve the previous page from the cache, rather than downloading the page again from the original Web page. Like most caches the contents are temporary, in the sense that they change dynamically as the user accesses further Web sites and the browser decides what to add to and delete from the cache.<sup>249</sup> However, they are certainly not transient and are stored on the disk between browser sessions like any other electronic file.

Enterprises, universities and institutions use a more complicated form of cache: All requests of the Internet are transmitted over intermediate servers to the internal company or university network (so-called Intranets).<sup>250</sup> On these servers, commonly accessed material of the Internet is stored on the cache for a particular time and is accessible for all the users.<sup>251</sup> This form of caching is also used by Internet service providers (ISP).<sup>252</sup> An ISP may store Web

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<sup>246</sup> Smith, *Internet Law and Regulation*, p.31.

<sup>247</sup> Smith, *Internet Law and Regulation*, p.31.

<sup>248</sup> Cahoy, *New Legislation regarding on-line service provider liability for copyright infringement*, p. 7.

<sup>249</sup> Smith, *Internet Law and Regulation*, p.31.

<sup>250</sup> A "Firewall" connects the Intranet with the Internet and examines the source and/or destination of data packets and prohibits unauthorised attempts to gain entry to the Intranet; Smith, *Internet Law and Regulation*, p. 1.

<sup>251</sup> Smith, *Internet Law and Regulation*, p.32.

<sup>252</sup> Hayes, *Advanced Copyright Issues on the Internet*, p. 64; Smith, *Internet Law and Regulation*,

pages that have been previously requested by its users on its own server. When another user subsequently requests a page previously stored, the page will be transmitted directly from the cache and not from the original source. This form of caching is known as proxy caching.<sup>253</sup>

(a)(iii) Proposal for a Solution

Certain African countries proposed an amendment to Article 7(2) of the Basic Proposal for the Substantive Provisions of the WIPO-Treaty.<sup>254</sup> The amendment reads as follows: "Temporary reproduction does not as such constitute a reproduction within the meaning of Article 9(1) of the Berne Convention and this Treaty where –

- such temporary reproduction is made for the sole purpose of making a work perceptible; or
- such temporary reproduction is part of a technical process incidental to the transmission or utilisation of the work concerned; or
- such reproduction is incidental to the use of the work as authorised by the rightholder concerned or permitted by law."

The EC Directive on the legal protection of computer programs says in its article 5(a) that the copyright owner reserves the right to make a "permanent or temporary, complete or partial, reproduction of a computer program in any manner or form. As far as it is required during loading, making visible, running, transmitting or storing the computer program". It is yet not clear how this wording has to be interpreted. On the one side stands the opinion, that every reproduction, even mere technical ones, has to be qualified as a reproduction. On the other hand it is argued that article 5(a)(2) of the DCP

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p.32.

<sup>253</sup> Hayes, *Advanced Copyright Issues on the Internet*, p. 64.

<sup>254</sup> Article 7(2) of the Basic Proposal reads as follows: "Subject to the provisions of Article 9(2) of the Berne Convention, it shall be a matter for legislation in Contracting Parties to limit the right of reproduction in cases where a temporary reproduction has the sole purpose of making the work perceptible or where the reproduction is of a transient or incidental nature, provided that such reproduction takes place in the course of use of the work that is authorised by the author or permitted by law".

expressly uses the terms "as far as it is required" and this could be seen as a restriction of the previous defined right of reproduction. Therefore, a second opinion states, that this restriction only make sense, as long as permissible reproductions are existing.<sup>255</sup>

A solution can only be found with regards to the meaning and intention of the right of reproduction. The right of reproduction shall protect the copyright owner from unauthorised copies being made, which result in an economical loss in the final.<sup>256</sup> Therefore reproductions which are not in conflict with a normal exploitation of the work and are not unreasonably prejudicial to the legitimate interests of the owner of the copyright are permitted by the Act.<sup>257</sup>

Interim copies that are stored, for example, on a cache are comparable with a storehouse of a printing office but with a decisive difference. After accessing the server of the local browser and making a Web site visible on the user's screen, the copy remains on the cache and a further copy is produced in the user's computer. The copy, which actually affects the interests of the copyright owner is the one on the user's computer, not the one on the cache. The copy stored on the user's computer is the one which open up new and independent possibilities of use.<sup>258</sup> A purely technical copy, such as the one on the cache, does not open up new and independent possibilities of use. Copyright must be guaranteed, if a third party would unauthorised reap the fruits of the author's labour. But during the transmission of data on routers and storing on a cache, a third party does not participate. It does not have an effect on the economic revenue of the copyright owner. The storage of material on the cache should therefore be classified as a technical necessity for the functioning of the Internet, rather than an act that requires the permission of the author. If the law categorises all interim transmissions as copies for copyright law purposes, or treats all such transmissions as falling

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<sup>255</sup> BGH, GRUR 1991, p. 449, 453 (Supreme Court Germany).

<sup>256</sup> Lewinski, The proposal of the EU for a guideline of copyright and related rights in the information society, p. 639; Dreier in Gerhard Schricker, *Copyright on its way to the information society*, p. 112.

<sup>257</sup> See for example sections 12 and 13 of the Act.

<sup>258</sup> Dreier, *Copyright Law and Digital Exploitation of Works*, p. 11.

within the right of distribution of the copyright owner, then activities that have been permissible with respect to traditional tangible copies of works may now fall within the control of the copyright owner.

Although interim copies on the Internet are reproductions within the meaning of the Act, from a practical point of view, an extensive interpretation of the right of reproduction in this case does not seem to be necessary and meaningful. The transmission is only useful for the forwarding of data. The copying takes place through largely uncontrolled and mechanical action by the online provider's computers. Therefore, as long as protection can be provided, in other words, if control over the reproduction at the receiving end is guaranteed, a mere technical reproduction, such as the one on the cache, should not fall within the exclusive right of reproduction, or otherwise should be considered as part of the fair dealing principle in the exceptions of the Act.<sup>259</sup>

The uncertainty of classifying mere technical reproductions is already clarified by the EC Directive of the copyright and related rights in the information society: Article 5(1) of the EC Directive says, that the union members must exclude temporary reproductions of the protection, which are part of a mere technical process. A technical process is defined as a process, which is necessary to make the work available for use, but has no individual economic value. This exception is to be made under the conditions of the three-step test in Article 5(4) of the EC Directive, which is considering the justified interests of the copyright owner.

#### *(b) Temporary Storage*

Web technology may create a number of temporary reproductions of a requested file not only during the transfer of works across the network, but

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<sup>259</sup> See also section 13 of the Act, whereas a reproduction is permitted when it "is not in conflict with a normal exploitation of the work and is not prejudicial to the legitimate interests of the owner of the copyright."

usually in the Random Access Memory (RAM) of the user's computer. In contrast to the traditional "rummage around" or specific search in a bookstore, a user, while browsing through the Web, already stores a "copy" of the content of the visiting Web site at least in the RAM of his computer, since the original work, or already a copy thereof, remains simultaneously on the storage device of the sender's computer. Technically spoken, when a user browses through the Web and accesses a Web page, a Transmission Control Protocol (TCP) connection takes place. Furthermore, a separate TCP connection is created by each inline graphic in a Web document when contact is made with the server that holds that graphic. Thus, when a user requests a single Web document, multiple TCP requests are made to the same or different Web servers. Each TCP connection retrieves a copy of the specified file, regardless of whether the file is composed of text or images. Although the whole process is transparent to the user, the Web document is actually transmitted and stored as a copy in the RAM of the user's computer. Storage is a necessity of the technology. It is neither optional nor specifically initiated by the user, because there is no way of avoiding this step of the process. A computer's RAM temporarily records data and loses it when a user turns the computer off.<sup>260</sup> In addition, most RAM is "dynamic" (DRAM), meaning that even while the computer is on, the data must be continually refreshed in order to remain readable. This lead to the question if the copy in the RAM is a copy sufficient for infringement purposes.

(b)(i) International Legislature

(b)(i)(1) United States

In the United States, for instance, some courts have suggested that copies of a program loaded into the RAM may be relevant for copyright purposes.<sup>261</sup> In

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<sup>260</sup> In contrast to RAM, a computer's Read-Only Memory (ROM) permanently stores files without losing them after a user turns the power off. See Carr, *Computer Software*, p. 4.

<sup>261</sup> *MAI Systems Corp v Peak Computer Inc*, 991 F.2d 511, 26 U.S.P.Q.2d (BNA) 1458 (9th Cir. 1993). At least three courts have followed the court in MAI, see *Triad Sys Corp v Southeastern Express Co*, 64 F.3d 1330, 1333-35, 36 U.S.P.Q.2d (BNA) 1028, 1030, 1032 (9th Cir. 1995);

the *Mai Systems v Peak Computer* decision, the court relied on a report of the National Commission on New Technological Uses of Copyrighted Works (CONTU) which stated that "the placement of a work into a computer is the preparation of a copy". The court in MAI held that copying, for the purposes of copyright law, occurs when a computer program is transferred from a permanent storage device to a computer's RAM.<sup>262</sup> It was argued that "the copy created in RAM can be "perceived, reproduced, or otherwise communicated" and thus held that the loading of software into the RAM creates a copy under the Copyright Act. The court in MAI realised that the copy of the operating system was stored in RAM for several minutes, rather than only a few seconds, and in addition, the court emphasised that while in RAM, the output of the program was viewed by the user, which confirmed the conclusion that the RAM copy was capable of being perceived with the aid of a machine.<sup>263</sup> The criticism against this interpretation of section 101 of the U.S. Copyright Act was mainly based on the argument that it appears to be at odds with the legislative history of the 1976 U.S. Copyright Act followed by the conclusion that RAM copies are too transitory or ephemeral to be infringing.<sup>264</sup>

In *Mairobie-FL, Inc. v National Association of Fire Equipment Distributors and Northwest Nexus Inc.*,<sup>265</sup> Mairobie alleged that the National Association of Fire Equipment Distributors (NAFED) had made available through its Web site files

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*Mairobie-FL, Inc v National Association of Fire Equip. Distrib.*, 983 F.Supp. 1167, 1177-78, 45 U.S.P.Q.2d (BNA) 1236, 1243-44 (N.D. Ill. 1997); *Advanced Computer Servs, Inc v MAI Sys Corp*, 8445 F.Supp. 356, 363-64, 30 U.S.P.Q.2d (BNA) 1443, 1449 (E.D. Va. 1994) (Although the court followed the MAI decision, it suggested that only copies that exist for several minutes should constitute a copy within the purview of copyright law).

<sup>262</sup> *MAI Systems Corp. v Peak Computer, Inc.*, 991 F.2d at 529 (9th Cir. 1993). The definition of a "fixed" work in section 101 of the U.S. Copyright Act reads as follows: A work is "fixed" in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration. A work consisting of sounds, images, or both, that are being transmitted, is "fixed" for purposes of this title if a fixation of the work is being made simultaneously with its transmission.

<sup>263</sup> *MAI Systems Corp. v Peak Computer, Inc.*, 991 F.2d at 518, 26 U.S.P.Q.2d at 1463.

<sup>264</sup> The conclusion referred to a House Report accompanying the enactment of the Copyright Act (H.R. Rep. No. 944-14476, at 53 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5666). According to the legislative history, "the definition of 'fixation' would exclude from the concept purely evanescent or transient reproductions such as those projected briefly on a screen, shown electronically on a television or other cathode ray tube, or captured momentarily in the 'memory' of a computer".

<sup>265</sup> *Mairobie-FL, Inc v National Association of Fire Equipment Distributors and Northwest Nexus Inc.*, 983 F.Supp.1167, 45 U.S.P.Q.2d (BNA) 1236 (N.D. Ill. Nov. 13, 1997).

of copyrighted and digitised "clip art" developed by Mairobie for use by people in the fire service industry. In support of its direct infringement claim against NAFED, Mairobie alleged that one of NAFED's agents had obtained a copy of the clip art and had transferred that material first onto his hard disc and then, through the Internet onto the hard disc of an Internet Service provider (Northwest), where the files of NAFED's Web page are stored. When an Internet user requests a file that is posted on NAFED's Web page, Northwest's computer sends the information in the requested file to the user's local computer or Internet address, which is known as downloading a file. According to Northwest, when the information in a requested file is sent to an Internet user, the information passes in electronic form through the RAM of Northwest's computer. Plaintiff claims that Northwest directly infringed its copyright each time an Internet user downloaded one or more of the files containing plaintiff's clip art, because each time, Northwest's computer "copied" the files from its hard drive to its RAM. As the court observed, Northwest acknowledged that its computer automatically copies the desired file when requested by an Internet user. This copy, located in the RAM of Northwest's computer is transmitted to the Internet user. However, Northwest argued that because the RAM copy was not "fixed" it did not constitute a copy for purposes of the Copyright Act. The court found that the copy of the clip art files in Northwest's RAM constituted "copying", whether the information in this file was transmitted in pieces that were assembled at the requester's Internet address or whether all of the information remained in the defendant's RAM at one time was immaterial. "The fact that a copy is transmitted after it is created or even as it is created, does not change the fact that once an Internet user receives a copy, it is capable of being perceived and thus 'fixed'."

*(b)(i)(2)* United Kingdom

The U.K. 1988 Act for the first time made provision for electronic media. Since then, in Great Britain, a reproduction is required to exist in any material form, albeit this also includes storing the work in any medium by electronic

means.<sup>266</sup> It is also provided that copying in relation to any category of work includes the making of copies, which are transient or incidental to some other use of the work.<sup>267</sup> Therefore it is argued that a software program loaded into a computer's RAM should be considered to be a copy for the purpose of the U.K. copyright law.<sup>268</sup>

### (b)(i)(3) International Contracts

International contracts have not expressly regulated the temporary storage of a work. Article 9 of the TRIPS-Agreement declares the right of reproduction in the Berne Convention as applicable. Article 9(1) of the Berne Convention reads as follows: "..., authors of literary and artistic works protected by this Convention shall have the exclusive right of authorising the reproduction of these works, in any manner or form". This definition of a reproduction is nearly of the same wording as in the terms of the Act. The method used for the reproduction does not matter.<sup>269</sup>

The WIPO Copyright Treaty neither offers any regulation to this issue. To qualify a temporary storage was the issue of the draft paper, but it did not find the consensus of the party members.<sup>270</sup> Only the following statement was included in the records of the conference: "...that it is understood that the storage of a protected work in a digital form in an electronic medium constitutes a reproduction within the meaning of Article 9 of the Berne Convention."<sup>271</sup> However, the question of what constitutes storage was left open. Article 7 of an earlier draft of the WIPO Copyright Treaty (Basic Proposals for the Substantive Provisions of the Treaty) would apparently have

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<sup>266</sup> Section 17(2) of the CDPA.

<sup>267</sup> Section 17(6) of the CDPA.

<sup>268</sup> MacQueen, *Copyright and the Internet*, p. 80.

<sup>269</sup> Nordemann, *International Copyright, Berne Convention*, Article 9 of the Berne Convention, p. 108. Section 9(3) of the Berne Convention gives an example: "Any sound or visual recording shall be considered as a reproduction for the purposes of this Convention".

<sup>270</sup> The non-adopted article 7(1) of the Basic Proposal for the Substantive Provisions of the Treaty reads as follows: "The exclusive right accorded to authors of literary and artistic works in Article 9(1) of the Berne Convention of authorising the reproduction of their works shall include direct and indirect reproduction of their works, whether permanent or temporary, in any manner or form". See Smith, *Internet Law and Regulation*, p. 17.

<sup>271</sup> Smith, *Internet Law and Regulation*, p. 17.

adopted the approach of the MAI court decision to the question of whether RAM copies fall within the reproduction right of the copyright holder.<sup>272</sup> The treaty, however, only refers in general to the Berne Convention.<sup>273</sup> In contrast to Article 7 of the Basic Proposal for the Substantive Provisions of the Treaty, Article 9(1) BC does not expressly use the wording "whether permanent or temporary, in any manner or form". The reference to "temporary" reproductions would have seemed to cover copies in RAM. The reference to "indirect" reproductions, particularly when coupled with the inclusion of "temporary" reproductions, might have been broad enough to cover interim, partial reproductions in the RAM in the course of transmission of a work through the Internet, as well as complete copies of a work made in RAM and/or on a hard disc at the receiving computer.

#### *(b)(i)(4) European Community*

With regard to the reproduction right, the EC Directive of the copyright and related rights in the information society<sup>274</sup> (hereinafter EC Directive) adopts essentially the same broad language of proposed article 7(1) of the WIPO Copyright Treaty that provoked so much controversy. Specifically, article 2 of the EC Directive provides that member states must "provide for the exclusive right to authorise or prohibit direct or indirect, temporary or permanent reproduction by any means and in any form," of copyrighted works.<sup>275</sup> The extension of the reproduction right to "direct or indirect" and "temporary or permanent" reproductions would seem to cover even incorporeal copies of a work made during the course of transmission or use of a copyrighted work on

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<sup>272</sup> The proposed article 7(1) provided: "The exclusive right accorded to authors of literary and artistic works in article 9(1) of the BC of authorizing the reproduction of their works shall include, in any manner or form, includes direct and indirect reproduction of their works, whether permanent or temporary, in any manner or form."

<sup>273</sup> The agreed statement concerning article 1(4) of the WCT reads as follows: The reproduction right, as set out in Article 9 of the Berne Convention, and the exceptions permitted thereunder, fully apply in the digital environment, in particular to the use of works in digital form. It is understood that the storage of a protected work in digital form in an electronic medium constitutes a reproduction within the meaning of Article 9 of the Berne Convention."

<sup>274</sup> Proposal for a European Parliament and Council Directive on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society, 1988 O.J. (C 108) 6.

<sup>275</sup> This extensive definition agrees with article 9 of the Berne Convention.

the Internet.<sup>276</sup> According to article 2(e) of the EC Directive it is irrelevant, if wire or satellite transmits the work. The commentary to article 2 of the EC Directive notes that the definition of the reproduction right covers "all relevant acts of reproduction, whether on-line or off-line, in material or immaterial form."<sup>277</sup> Referring to copies in the RAM of a computer, the commentary states: "The result of a reproduction may be a tangible permanent copy, like a book, but it may just as well be a non-visible temporary copy of the work in the working memory of a computer."<sup>278</sup>

To provide counterbalance, however, article 5(1) of the EC Directive provides an automatic exception from the reproduction right for "temporary acts of reproduction ... which are an integral part of a technological process for the sole purpose of enabling use to be made of a work or other subject matter, and having no independent economic significance."<sup>279</sup> Thus, the EC Directive adopts an approach that affords the reproduction right a very broad inherent scope, but provides an explicit and automatic exception for copies that are made incidental to the use of a work through a technological process, such as transmission through a network or loading into the RAM of a computer.

#### (b)(ii) South African Law

Under the Copyright Act a reproduction is fulfilled, when the work is reproduced "in any manner or form".<sup>280</sup> The main argument why temporary

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<sup>276</sup> Previously, the EC Database Directive provides in article 5(a) that temporary reproduction is infringement of any copyright that a database may have (Parliament and Council Directive 96/9/EC). Note also the new *sui generis* right which is the right to prevent unauthorised extraction from a database regardless of its copyright status, which includes temporary transfer of all or part of the contents to another medium (article 7(2)(a)).

<sup>277</sup> Proposal for a European Parliament and Council Directive on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society, COM(97)628 final, article 2, cmt. 2, p. 32, see at <http://www.bna.com/e-law/docs/ecdraft.html> (visited January 1999).

<sup>278</sup> Proposal for a European Parliament and Council Directive on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society, COM(97)628 final, article 2, cmt. 3, p. 32.

<sup>279</sup> Proposal for a European Parliament and Council Directive on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society, COM(97)628 final, article 5(1).

<sup>280</sup> Sections 6(a), 7(a), 8(a), 10(a), 11B(a) of the Act.

storage can not be regarded as being a reduction to a material form is, that a temporary storage is brief and therefore not comparable with the condition of a corporeal fixation. However, compared to the above mentioned legislatures South Africa appears to be the one with the least requirements concerning a "reproduction". Since the other countries came to the conclusion that a copy exists, despite of their restricting definitions, this should be all the more be assumed where restrictions does not exist.

The storage in the RAM can technically not be compared with a storage on a data medium. As described above, unlike a copy that is stored on a hard disk or other data media, the copy in the RAM will be deleted after switching off the computer. But it has to be kept in mind that in both cases a reproduction took place, either during a temporary storage in the RAM or during a permanent storage on a data medium. A reproduction should not be denied with the argument that a user is not interested in keeping the work permanently stored. If a person copies unauthorised a book with a copier, a copyright infringement take place. If he destroys it afterwards immediately or puts it onto his shelf should not make any difference. The subject of copyright protection is the embodiment of the idea, not the idea itself.<sup>281</sup> This means that the request of a "material form" was needed to make the idea "visible" for others, distinguishable from other works and also available for exploitation. For example, the lyrics of a song, even though not previously written down, would be capable of being protected as a literary work once sung, provided that the singing was recorded. Otherwise, the lyrics would remain "invisible", in other words not available for exploitation, and therefore there would be no need for copyright protection.

What is therefore significant, regarding a temporary storage of a work on the Internet, is not the length of time that the work is available in a computer's RAM, but rather what can be done with the work once it is in there. A reproduction should therefore be qualified independently from the duration of

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<sup>281</sup> Dean, *Handbook of South African Law*, p. 1-18.

the storage.<sup>282</sup> The ability of the user to use the work is given at the time of storage in the RAM. The only difference to a permanent storage on a data medium is the fact that it is only transient and lost as soon as the computer is switched off. Therefore, with regard to South African law, a copy created in the RAM of the user's computer should also be considered as a reproduction for infringement purposes. However, with regards to all works in digital form, it should be clarified in the sections regarding the reproduction that temporary reproductions of such do fall under the exclusive reproduction right. Yet purely technical acts of reproduction should not fall within this right.

#### **4.2.1.2 The Right to Publish the Work**

It is specified in the Act that a literary, musical and artistic work or computer program is deemed to be published if copies of it have been issued to the public.<sup>283</sup> Any person who publishes a previously unpublished work without the authority of the copyright owner infringes copyright in the work.<sup>284</sup> In 1998, an advance copy of the first single from Madonna's new album was released in the United States to several foreign radio stations. Within days, unauthorised copies were placed on Web sites allowing anyone with Internet access to download a copy weeks before authorised copies would be available for sale or for U.S. radio to play.<sup>285</sup> At that stage of time, Madonna's single had not been published in the United States.<sup>286</sup>

Regarding this example, the first question to be answered is, if the right to publish a work may also apply to copies issued in intangible and even

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<sup>282</sup> Koch, *Rechte an Webseiten* (Protection of Web sites), NJW-CoR 5/97, p. 298, 299; Dreier, *Copyright on its way to the information society*, p. 862; High Court Düsseldorf (Germany), CR (Computer and Law) 1996, p. 728;

<sup>283</sup> Section 1(5)(e) of the Act.

<sup>284</sup> Sections 6(b), 7(a) and 11(B)(b) of the Act. See also Smith, *Copyright Companion*, p. 49.

<sup>285</sup> Schwimmer/Mende, *Madonna and Audio Streaming*, p.1.

<sup>286</sup> Under the U.S. Copyright Act the term "publication" is defined as "the distribution of copies or phonorecords of a work to the public by sale or other transfer of ownership, or by rental, lease, or lending. The offering to distribute copies or phonorecords to a group of persons for purposes of further distribution, public performance, or public display, constitutes publication. A public performance or display of a work does not of itself constitute publication." 17 U.S.C.A. 101 "Publication".

transient form,<sup>287</sup> such as when a person makes a work available for viewing and/or downloading from a Web site? But as described above, although the stream of bits from the Web site to the viewer's computer does not constitute a copy at any one time, the copy comes into existence when the bits are assembled at the recipient computer, hence fixed on a material form. Otherwise it would then follow that the user who accesses material and passes it on to another server is not guilty of infringement under this section so long as the transmission is electronic.

A second question to be answered is, how can the Web site owner have issued the copy, when he has only passively made the site available and it is the act of a third party visiting the site which causes the copy to be made? This on-demand transmission does not look much like the issue of copies to the public. Furthermore, section 5 of the Act expressly excludes a transmission in a diffusion service and a broadcasting of a work from the definition of a publication.<sup>288</sup> This regulation makes clear that the current right to publish a work does not clearly apply to network transmissions such as transmissions on the Internet(work). In the United Kingdom, the term publication means "the issue of copies to the public" and "includes ... making it available to the public by means of an electronic retrieval system."<sup>289</sup> Although this definition of publication consider the making available of a work, it is not clear, if this can also be seen for the issuing of copies to the public in section 18 of the Copyright, Designs and Patents Act.<sup>290</sup>

Therefore a further proposal would be the enacting of a so-called "transmission right" or "digital transmission right", which has already been subject to the Green Paper of the European Community in 1995,<sup>291</sup> or especially in the newly adopted World Intellectual Property Organisation (WIPO)-Treaties. The WIPO-Treaties have early considered the possibility to

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<sup>287</sup> The obvious application of the right to publish a work is to permanent copies issued on tangible media such as books or disks.

<sup>288</sup> Section 5(d)(iii) and (iv) of the Act.

<sup>289</sup> Section 175 of the Copyright, Designs and Patents Act.

<sup>290</sup> Smith, *Internet Law and Regulation*, p. 22.

<sup>291</sup> Green Paper, *Copyright and related rights in the information society*, Sect. V, p. 56; Dreier,

communicate online and adopted a broad new right of transmission and access to a copyrighted work. The right is denominated a "right of communication to the public" in the WIPO Copyright Treaty (WCT),<sup>292</sup> and is denominated a "right of making available to the public" in the WIPO Performances and Phonograms Treaty (WPPT).<sup>293</sup>

Article 8 of the WCT reads as follows:

"Without prejudice to the provisions of Articles 11(1)(ii), 11bis(1)(i) and (ii), 11ter(1)(ii), 14(1)(ii) and 14bis(1) of the Berne Convention, authors of literary and artistic works shall enjoy the exclusive right of authorising any communication to the public of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access these works from a place and at a time individually chosen by them."

This new right of communication to the public appears to be broader than the existing rights of communication to the public in the Berne Convention.<sup>294</sup> The right of Article 8 of the WCT does not require the making or distribution of copies of a work. Since then, a work can be offered to the public already through storing and making the access available to the public. Furthermore it affords the exclusive right to control any "communication to the public" of a work "by wire or wireless means." Although "communication" is not defined in the WCT, the reference to a communication "by wire or wireless means" seems clearly applicable to electronic transmissions of works.

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*Copyright on its way to the information society*, p. 863.

<sup>292</sup> Article 8 of the WCT.

<sup>293</sup> Article 8 of the WPPT.

<sup>294</sup> Article 11(1)(ii) of the Berne Convention provides that authors of dramatic, dramatic-musical works shall enjoy the exclusive right of authorising "any communication to the public of the performance of their works." Article 11bis(1)(ii) provides that authors of literary and artistic works shall enjoy the exclusive right of authorising "any communication to the public by wire or by rebroadcasting of the broadcast of the work, when this communication is made by an organization other than the original one." Article 11ter(1)(ii) provides that authors of literary works shall enjoy the exclusive right of authorising "any communication to the public of the recitation of their works."

This right affords the exclusive right of authorising any communication to the public. No actual communications to the public are apparently necessary to infringe the right. The right of authorising communications to the public explicitly includes "making available to the public" a work "in such a way that members of the public may access" the work "from a place and at a time individually chosen by them". The offer of a work on a server connected to the Internet, which is accessible for the public, therefore can be seen as a relevant act in terms of this treaty. It would allow the copyright owner to remove an infringing storage of a work prior to any downloading of that work. However, an extensive transmission right has already been criticised, because it would "enhance the exclusive right to control reading, viewing or listening to any work in digitised form."<sup>295</sup> Because "browsing" a book or magazine in a store has never been considered infringement, it is recommended, that browsing on a network should not be any different.<sup>296</sup>

#### **4.2.1.3 Performance Right**

The Act grants the owner of a copyrighted work the exclusive right to perform a work in public.<sup>297</sup> For the purposes of the Act, performing a work in public would include the performance of the work by any mode of visual or acoustic presentation, including presentation by the operation of a loudspeaker, a radio, television or diffusion receiver, or the exhibition of a cinematograph film or the use of a record or by any other means.<sup>298</sup> It is not clear whether public performance is restricted to what happens at the receiving screen, or whether making material available on a Web site for public consumption could in itself constitute public performance.<sup>299</sup> Under the Act, performance does not extend

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<sup>295</sup> Litman, *The Exclusive Right to Read*, p. 31.

<sup>296</sup> Cover, *The Emperor's Magic Suit: Proposed Legislation Will Tailor the Copyright Law to Fit the Internet*, p. 3.

<sup>297</sup> Under section 6(c) of the Act it is a restricted act to perform in public a literary or musical work and under section 8(1)(b) of the Act causing a cinematograph film, in so far as it consists of images, to be seen in public, or, in so far as it consists of sounds, to be heard in public.

<sup>298</sup> Section 1(1) *sv* "performance" of the Act.

<sup>299</sup> Smith, *Internet law and Regulation*, p. 23.

to broadcast or rebroadcasting or transmitting a work in a diffusion service.<sup>300</sup> An online transmission is comparable to a transmission in a diffusion service, because it takes place over wires or other paths by material substance and is intended for reception by specific members of the public.<sup>301</sup> The exclusion of the transmission in a diffusion service of the performance right does therefore not encompass the making available of material on a Web site for public consumption. Thus, the performance right is restricted to what happens at the receiving end, such as a computer screen. However, the performance has to take place in public, therefore a problem might be seen in the term "public" regarding the "public" on the Internet.

(a) The Term "Public" on the Internet

The reference to the term "public" is not completely clear as the Act does not include a definition of this term. In *South Africa Music Rights Org v Svenmill Fabrics (Pty) Ltd*,<sup>302</sup> in order to determine whether a work is performed in public, it was held necessary to consider the nature of the audience.<sup>303</sup> Traditionally, the audience has been grouped together in some place where members of the public may gather, such as a theatre, a club or a place of work, and was of manageable size and within reach simultaneously. It is suggested, that a performance would not be to the public, if the audience is part of a private gathering or a gathering of specific members of a business.<sup>304</sup> But if members of the general public have reasonable freedom of access to the performance, even as paying guests, this could be seen as a performance

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<sup>300</sup> Section 1(1) sv "performance" of the Act ; Smith, *Copyright Companion*, p. 50. See also section 19 of the U.K. Copyright, Designs and Patents Act, where performance, in contrast to the Act, includes any mode of visual or acoustic presentation, including presentation by means of sound recording, film, broadcast or cable programme and nevertheless it is proposed to restrict its application to what happens at the receiving screen, Smith, *Internet Law & Regulation*, p. 23.

<sup>301</sup> Section 1(1) sv "diffusion service" of the Act.

<sup>302</sup> 1983 (1) 608 (C) at 611.

<sup>303</sup> See also Alan Smith, *Copyright Companion*, p. 50.

<sup>304</sup> Alan Smith, *Copyright Companion*, p. 50. See also *SAMRO v Svenmill Fabrics (Pty) Ltd*, 1983 (1) 608 (C), stating that the "difference between a performance in private and one in public was that in the former case the entertainment formed part of the domestic or home life of the person who provided it; in the latter case the entertainment formed part of the non-domestic or outside life of the audience, and was in no sense part of their domestic life."

in public.<sup>305</sup> In *SAMRO v Svenmill Fabrics (Pty) Ltd*,<sup>306</sup> the court stated that playing music to its employees in a factory during normal working hours, is performing the work in public. However, it is no longer clear whether a gathering in one place is a necessary condition for performance in public.<sup>307</sup>

The above definition of the nature of the audience does not consider the specific character of the Internet. First, the users of the Internet are generally not comparable to the traditional audience, because they usually are located in separate places and are quite unaware of each other. Second, the users may receive the performance at different times and not simultaneous as traditional performances. Third, the user is not a "passive receiver" anymore, because the interactivity of the Internet allows him to determine the course of the performance. Generally, the term of public with regard to the Internet, must be seen world-wide, vast and within reach at different times. Especially the scope of the public performance right and the classification of the term "public" in context with the Internet lead to several disputes in different countries.

It has been held in Australia that playing recorded music "on hold" to users of mobile telephones was "in public" even though the distribution of the material was not necessarily, or even very often, simultaneous for each member of the audience.<sup>308</sup> The Spanish Supreme Court has also held that non-simultaneous transmissions of copyrighted material to different persons in individual bedrooms requires copyright licences.<sup>309</sup> In a similar case in the United States the court held in *On Command Video Corp v Columbia Pictures Industries, Inc*,<sup>310</sup> that the public performance right was implicated by a system of video cassette players wired to hotel rooms which was capable of transmitting guest-selected movies to the occupants of one room at a time.

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<sup>305</sup> Alan Smith, *Copyright Companion*, p. 50.

<sup>306</sup> 1983 (1) 608 (C) at 613.

<sup>307</sup> MacQueen, *Copyright and the Internet*, p. 83.

<sup>308</sup> *Australian Performing Right Association Ltd. v Telstra Corporation Ltd.*, Federal Court of Australia (1997) 28IIC 136.

<sup>309</sup> *SGAE v Hotel Blanco DonJ.SA*, (1997) 1 EIPR D-21.

In the United States the exclusive right to perform the work publicly applies to public performances by digital transmission,<sup>311</sup> although a public performance of a sound recording may infringe the right of public performance of the underlying musical work that is recorded in the sound recording.<sup>312</sup> The United States Copyright Act (USCA) clearly encompasses transmissions of works and defines in its section 101 of the USCA that to perform a work publicly means: (1) to perform ... it at a place open to the public or at any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered; or (2) to transmit or otherwise communicate a performance ... of the work to a place specified by clause (1) or to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.

For example, in *Playboy Enterprises, Inc v Frena*,<sup>313</sup> a U.S. court held that the making of photographs available on a bulletin board service (BBS) was a public display,<sup>314</sup> even though the display was limited to subscribers, and subscribers viewed the photographs only upon downloading the photographs from the BBS on demand. Similarly, in *Mairobie-FL, Inc v National Association of Fire Equipment Distributors*,<sup>315</sup> the court ruled that the placement of the plaintiff's copyrighted clip art on the defendant's Web page constituted a direct violation of both the plaintiff's distribution right and public display right. Finally, in *Playboy Enterprise, Inc v Webbworld, Inc*,<sup>316</sup> the court held the defendants liable for infringing public displays of copyrighted images for making such images available through a Web site for downloading by subscribers.

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<sup>310</sup> 777 F. Supp. 787, 789, 21 U.S.P.Q.2d (BNA) 1545, 1546 (N.D. Cal. 1991).

<sup>311</sup> The Digital Performance Right in Sound Recording Act of 1995 created a limited public digital performance right in sound recordings. These exemptions do not apply to an "interactive" service, such as the Internet, which the copyright statute defines as a service "that enables a member of the public to receive, on request, a transmission of a particular sound recording chosen by or on behalf of the recipient." See 17 U.S.C.A. 114(d)(1) and j(4).

<sup>312</sup> 17 U.S.C.A. 106(6).

<sup>313</sup> 839 F.Supp. 1552, 29 U.S.P.Q.2d (BNA) 1827 (M.D. Fla. 1993).

<sup>314</sup> Section 101 of the U.S.C.A. defines the meaning of "to display a work publicly" in virtually identical terms as the definition of "to perform a work publicly."

<sup>315</sup> 983 F.Supp. 1167, 45 U.S.P.Q.2d (BNA) 1236 (N.D. Ill. 1997).

<sup>316</sup> 991 F.Supp. 543, 550-53, 45 U.S.P.Q.2d (BNA) 1641, 1645-47 (N.D. Tex. 1997).

The scope of the public performance right and the classification of the term "public" were also discussed throughout the adaptation of the WIPO treaties. The agreement became element of article 8 of the WIPO Copyright Treaty. The right of communication to the public in article 8 of the WIPO Copyright Treaty provides that members of the public may access literary and artistic works "from a place and at a time individually chosen by them."<sup>317</sup> The public must therefore neither be assembled at a same place nor access the work at the same time, which has been the traditional definition. It is not a condition that the offer of the work has to be simultaneous to different members of the public.<sup>318</sup> Sufficient is the individual choice of place and time of the access considering simultaneous accessibility. The critical question remains the relation between the copyright owner and the audience, "emphasising the primacy of the owner's entitlement to an economic return from his proprietary rights".<sup>319</sup> Thus, only because the technical development allows a transmission, which reaches the public, but in a different way than the present transmissions, it should not be concluded that there is not a "public" anymore. However, this definition of the public should only apply to individual acts of an user accessing a work on the Internet. Applications, such as Pay-TV, Pay-per-View or Near-video-on-demand, are offered independent of the user's demand and therefore not suitable to the above regulation.

To sum it up, the Act should provide a definition of the term "public" which considers an individual chosen reception at separate places and at different times, as long as the work can be accessed simultaneous. It will remain the task of case law to clarify when an individual person or a number of persons belong to the public in an individual case.

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<sup>317</sup> The same wording is also used in article 10 of the WPPT (Right of making available of fixed performances) and article 14 of the WPPT (Right of Making Available of phonograms).

<sup>318</sup> Lewinski, *The proposal of the EC for a guideline of copyright and related rights in the information society*, p. 639

<sup>319</sup> MacQueen, *Copyright and the Internet*, p. 83.

### (b) The Scope of the Performance Right on the Internet

If a transmission of a work on the Internet does not fall within the exclusive right of the copyright owner to perform a work, the copyright owner may not be protected sufficiently. For example, transmission of the digitally encoded sounds of a musical work to the hard disk of a recipient computer may infringe the right of distribution of the work, as well as the reproduction right, but not the performance right, because the work is not being performed at the recipient's end.

Therefore one of the most debated issues concerning the scope of the public performance right in online contexts is whether the "performance" must be accomplished by a transmitted signal that is capable of immediate conversion to a performance moment-by-moment in time, or whether it is sufficient that the transmitted signal is sent either faster or slower than the embodied performance (referred to as asynchronous transmission).<sup>320</sup>

The definition of performing the work in public in section 1 of the Act was drafted at a time when "transmissions" were generally a performance moment-by-moment in time, as in broadcasting. If this definition is read to require such a transmission, then many online activities, such as downloading of works on the Internet (being asynchronous transmissions), may not fall within the performance right.

Even if a transmission moment-by-moment in time is required for a public performance, the distinction between moment-by-moment in time and asynchronous becomes blurred on the Internet. Because the material on the Internet is transmitted in separate data packets, all transmissions through the Internet are in some sense asynchronous. However, as soon as the data packets are reassembled at the receiving end, even an asynchronous transmission can produce a smooth, moment-by-moment performance at the

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<sup>320</sup> Hayes, *Advanced Copyright Issues on the Internet*, p. 30.

receiving end.<sup>321</sup> Therefore one can argue that the determinative factor of whether a public performance has been accomplished should be judged from the perspective of what the recipient perceives, not the transmission technology used, especially if the transmitting party controls when and what the recipients sees. In the United States therefore the Senate Report accompanying the Digital Performance Right in Sound Recordings Act of 1995 suggests that burst transmissions for prompt playback may constitute public performances: "If a transmission system was designed to allow transmission recipients to hear sound recordings substantially at the time of transmission, but the sound recording was transmitted in a high-speed burst of data and stored in a computer memory for prompt playback (such storage being technically the making of a phonorecord), and the transmission recipient could not retain the phonorecord for playback on subsequent occasion's (or for any other purpose), delivering the phonorecord to the transmission recipient would be incidental to the transmission."<sup>322</sup>

### (c) Proposal for a Solution

Online transmissions on the Internet do affect the exclusive right to perform a work in public. The WIPO treaties are providing at present sufficient protection for the copyright owner regarding his performance right to face the technical development. It is conceivable, that the current public performance right become subsumed in the potentially broader right of "communication to the public" or "making available to the public" contained in the WIPO Treaties discussed above.<sup>323</sup> However, South Africa has not signed one of the WIPO Treaties.

Under the current definition of the terms "public" and "performance", the performance right of the South African copyright law does not grant sufficient protection to the copyright owner. To follow the achievements of the WIPO

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<sup>321</sup> Hayes, *Advanced Copyright Issues on the Internet*, p. 30.

<sup>322</sup> S. Rep. No. 104-128, at 39 (1995), reprinted in 1995 U.S.C.C.A.N. 356, 386.

<sup>323</sup> See chapter 2 (International Harmonisation of Copyright Protection).

treaties, the Act should adapt a new right of transmission or, as named in the WIPO Copyright treaty, a right to communicate to the public. The definition of "communicate a work to the public" could be as follows: "A work is publicly communicated, if it is accessible or at the same time perceptible for a majority by members of the public or if it is due to a supply addressed to the public accessible for an individual member of the public". This definition would eliminate the uncertainty of how and when a work on the Internet can be received by the public simply by clarifying that it is sufficient if the public has the possibility of a simultaneous access to the work.<sup>324</sup> To the definition of the "public" ("...to the public belongs everybody") should be added the following sentence: "..., unless he is inter-connected by personal relations to the person who exploits the work, or with other persons, for who the work in material or transient form is made perceptible or accessible".

#### **4.2.1.4 Broadcasting Right**

The right of broadcasting the work can only be infringed on the Internet if the transmission and/or use of a work on the Internet constitute a broadcast.<sup>325</sup> A broadcast is defined by law in section 1(1) sv "broadcast" of the Act as follows: "'broadcast', when used as a noun, means a telecommunication service of transmissions consisting of sounds, images or signals which (a) takes place by means of electromagnetic waves of frequencies of lower than 3000 GHz transmitted in space without an artificial conductor; and (b) is intended for reception by the public or sections of the public, and includes the emitting of programme-carrying signals to a satellite".

This definition does not include a transmission by wire. Although the information on the Internet should be mainly transmitted over satellites in the near future, presently the Internet still is the underlying collection of different

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<sup>324</sup> For example section 1 of the United States Copyright Act defines performing a work "publicly" to include performance by transmission to an audience that may receive the transmission at different times at different places, or both.

<sup>325</sup> Sections 6(d), 7(c), 8(c) and 10 of the Act.

networks, which are build up on wires.<sup>326</sup> Although the Internet is mainly based on wire transmissions, it has no single information channel, it rather uses various routes to transmit the information including telephone lines, satellite links or mobile phone signals. For example, there are mixed path systems used whereby the user receives data by high bandwidth satellite link, but sends requests and other data back to the access provider by ordinary low bandwidth telephone connection.<sup>327</sup> Since the Internet is dependent on the wires of the telecommunications system, transmission on the Internet can not be classified as broadcast under the definition of section 1(1) sv "broadcast" of the Act.<sup>328</sup> Thus, copyright protection is at present unavailable through this medium, at least for the moment.<sup>329</sup>

Furthermore this classification would miss the different characters of broadcast and the Internet. Although some similarity between broadcast and a transmission on the Internet can be seen: Data packets are transmitted on a net, like television or radio signals, and can be theoretically received at the same time. Both, the television transmitter and the server on the Internet, where the material is stored, offer continuously information to the public and the user or recipient receives this information in his home or at his work place. The user access these information as soon as he switched on the computer and is online just like the recipient who joins the program by switching on his television set. However, an essential difference is that on the Internet the beginning and the content of the transmission is also determined by the user himself. Also there are differences within the transmission of the content. Broadcast is transmitted by point-to-multipoint (one station to several recipients) whereas data on the Internet are separately transmitted point-to-point in data packets (server to end-user).

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<sup>326</sup> Smith, *Internet Law and Regulation*, p. 23.

<sup>327</sup> Smith, *Internet Law and Regulation*, p. 23.

<sup>328</sup> This conclusion correspond to the legal examination regarding transmissions on the Internet in Great Britain, where the definition of broadcast in section 6 of the Copyright, Designs and Patents Act is similar to the wording in the South African Copyright Act. See also MacQueen, *Copyright and the Internet*, p. 76.

#### **4.2.1.5 Transmission Right**

A transmission on the Internet could be classified as a transmission in a diffusion service.<sup>330</sup> A diffusion service is defined under section 1(1) sv "diffusion service" of the Act as a "telecommunication service of transmissions consisting of sounds, images, signs or signals, which takes place over wire or other parts provided by material substance and intended for reception by specific members of the public". The telecommunication service of transmission can be extended to diffusions by means of telephone networks and through other audio networks.<sup>331</sup>

It is questionable whether the Internet constitutes a diffusion service. Data on the Internet are transmitted through existing telecommunication networks, for example wires, ISDN or glass fibre cables. However, transmission on the Internet does not exclusively take place over wires or other paths of "material substance". As explained above, information on the Internet uses various routes to travel among which are satellites and, since recently, mobile phone signals also. These paths are not, or at least not completely, made of material substance. A transmission on the Internet therefore takes place over a mixed path system of "material substance" and "satellites". Furthermore, a "diffusion service" has been described by a South African court as "something of an amenity such as is provided to a hotel guest or to a hospital patient in his room; he presses one of a series of buttons or turns one of a series of knobs and thereby selects the programme of one or another of the services provided by the South African Broadcasting Corporation, or that of an in-house service, i.e. a series of musical items being played on the record-player of the hotel or hospital".<sup>332</sup> This is certainly not comparable to the Internet.

The definition in the Act is also confined to the terms "transmission" and "intended for reception". On the Internet, information can be accessed

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<sup>329</sup> See also Smith, *Internet Law and Regulation*, p. 23.

<sup>330</sup> Sections 6(e), 7(d) and 8(d) of the Act.

<sup>331</sup> Alan Smith, *Copyright Companion*, p. 50.

<sup>332</sup> *Southern African Music Rights Organisation Ltd v Svenmill Fabrics (Pty) Ltd*, 1983 (1) SA 608 (C) at 610.

interactive, in other words, the recipient becomes active. The transmission is therefore not only "intended for reception" anymore, it allows due to its interactivity a form of communication. In the United Kingdom the question had to be answered, whether a Web site falls within the definition of a cable programme.<sup>333</sup> The problem was that the Copyright, Designs and Patents Act in the U.K. defines a cable programme as a service consisting wholly or mainly in "sending" information.<sup>334</sup> Therefore the arguments against a Web site being a cable programme was that a Web site does not involve "sending" information but rather allows information to be accessed by members of the public. However, the interactivity of a Web site was not held as an essential part of the service provided.<sup>335</sup> A narrow approach of the word "sending" was rejected and it was argued, that at the very least a Web site operator enables the material to be sent.<sup>336</sup> In any case, regardless of this argumentation, the definition of a "diffusion service" in the South African Copyright Act does not allow a direct application on the Internet. Regarding the development of transmissions on the Internet it should therefore be considered in the Act that a transmission can take place over a mixed path system of wires and satellites.

#### **4.2.1.6 Adaptation Right**

The copyright owner has the exclusive right to make an adaptation of his work.<sup>337</sup> An "adaptation" is defined under the Act in section 1(1) sv "adaptation" of the Act.<sup>338</sup> The adaptations have to be a "version of the work",

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<sup>333</sup> See *Shetland Times Ltd. v Dr. Jonathan Wills and Zetnews Ltd.*, at <http://www.carltons-dunde.co.uk/features/shetland.htm> (last visited April 1999).

<sup>334</sup> Section 7 of the Copyrights, Designs and Patents Act 1988.

<sup>335</sup> *Shetland Times Ltd. v Dr. Jonathan Wills and Zetnews Ltd.*, at <http://www.carltons-dunde.co.uk/features/shetland.htm> (last visited April 1999).

<sup>336</sup> *Shetland Times Ltd. v Dr. Jonathan Wills and Zetnews Ltd.*, at <http://www.carltons-dunde.co.uk/features/shetland.htm> (last visited April 1999).

<sup>337</sup> Sections 6(f), 7(e), 8(e) and 11B(d) of the Act.

<sup>338</sup> Section 1(1) sv "adaptation" of the Act reads as follows: "adaptation", in relation to (a) a literary work, includes as "(i) in the case of a non-dramatic work, a version of the work in which it is converted into a dramatic work; (ii) in the case of a dramatic work, a version of the work in which it is converted into a non-dramatic work; (iii) a translation of the work; or (iv) a version of the work in which the story or action is conveyed wholly or mainly by means of pictures in a form

"arrangement or transcription of the work" or "transformation of the work". The definition therefore does not require that the adaptation holds a special material form. Thus, those who adapt a copyrighted work in the RAM or any data medium may face liability under the copyright owner's right to make an adaptation of the work.

In relation to a computer program an adaptation means an arrangement or altered version of the program or a translation of it. In relation to a computer program an adaptation includes a version of the program in a programming language, code or notation different from that of the program or a fixation of the program in or on a medium different from the medium of fixation of the program.<sup>339</sup> It should be noted that section 19B of the Act provides several exceptions regarding protection of computer programs.<sup>340</sup> If the user of a computer program is in lawful possession of that computer program, or an authorised copy thereof, the copying or adapting is lawful if it is for example necessary for back-up purposes or personal or private purposes.<sup>341</sup>

Furthermore the digitisation of a work could be an adaptation of a work. The digitisation of a work could be classified as a translation of the work.<sup>342</sup> However, digitisation is a mere technical process, therefore digitisation as such does not attract protection to the benefit of a person or entity that merely digitises analogue material.<sup>343</sup>

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suitable for reproduction in a book or in a newspaper, magazine or similar periodical; (b) a musical work, includes any arrangement or transcription of the work, if such arrangement or transcription has an original creative character; (c) an artistic work, includes a transformation of the work in such a manner that the original or substantial feature thereof remain recognisable; (d) a computer program includes (i) a version of the program in a programming language, code or notation different from that of the program; or (ii) a fixation of the program in or on a medium different from the medium of fixation of the program;.

<sup>339</sup> Section 1(1)(d) *sv* "adaptation" of the Act.

<sup>340</sup> Section 19B of the Act provides that the provisions of sections 12(1)(b), (c), (2), (3), (4), (5), (12) and (13) of the Act shall *mutatis mutandis* apply, in so far as they can be applied, with reference to computer programs.

<sup>341</sup> Section 19B(2)(a) and (b) of the Act. Section 19B(2)(c) of the Act requires that such copy is destroyed when the possession of the computer program in question or authorised copy thereof, ceases to be lawful.

<sup>342</sup> Section 1(1) *sv* "adaptation" (a)(iii) of the Act. See also MacQueen, *Copyright and the Internet*, p. 84.

<sup>343</sup> Dreier, *Copyright on its way to the information society*, p. 860

#### **4.2.1.7 Authorisation**

Authorisation of another to infringe is itself infringement.<sup>344</sup> This form of liability has obvious importance for the commercial Internet online providers, bulletin board services, universities, and other bodies, which set up the facilities on which infringing Internet activity takes place. Can such bodies be liable for infringing use of the facilities as authorising it to take place? This specific question will be answered below in an own section in connection with the examination of the liability of online providers.

#### **4.2.1.8 Exceptions on Copyright**

The South African copyright act provides several exemptions from protection by which various specific acts, which would otherwise fall with the scope of the infringement rules, are made lawful.<sup>345</sup> The exemptions from protection differ considerably from work to work. However, the exemptions have in common that they are all instances in which it is considered to be in public interest that the copyright owner should not have a monopoly in the performance of particular acts in relation to his work.<sup>346</sup>

The exemptions permit copyrighted materials to be reproduced or shared without compensation for purposes such as private use, criticism, reporting current events, quotation, teaching, scholarship or research.<sup>347</sup> The requirements of these exemptions are that the use must be compatible with fair practice, the extent of the use must be justifiable and the source, as well

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<sup>344</sup> Section 23(1) of the Act reads as follows: "Copyright shall be infringed by any person, ..., who ... causes any other person to do, in the Republic, any act which the owner has the exclusive rights to do or to authorize."

<sup>345</sup> Sections 12-19B of the Act.

<sup>346</sup> Dean, *Handbook of South African Copyright Law*, p. 1-51.

<sup>347</sup> The South African copyright act contrasts with United States law, which provides a general "fair use" defence covering purposes "such as" criticism, comment, teaching, scholarship and research, and indicating that factors to be taken into account "include" such matters as whether the use is of a commercial nature or for non-profit educational purposes, the nature of the work, the amount and substantiality of the portion used in relation to the whole work, and the effect of the use upon the market or value of the copyrighted work, 17 U.S.C. 107.

as the author, must be acknowledged.<sup>348</sup> These are rather imprecise concepts and will need to be considered within the specific circumstances within which the use occurs. On the other hand, the copyright owner may grant licences to another and therefore transfer his rights.<sup>349</sup> The two exceptions that are of particular interest in the context of copyright infringement on the Internet are the "fair dealing" clause and an implied licence granted by the author.

### (a) Fair Dealing

The Act contains a fair dealing clause for a number of works and is predicated on the assumption that in principle an act of infringement has been committed and this act is then excused by the exception.<sup>350</sup> The fair dealing clause provides that copyright shall not be infringed when the use of literary, musical and artistic works and published editions is made for "purposes of research or private study by, or the personal or private use of, the person using the work"<sup>351</sup>. Furthermore, if the person is in lawful possession of a computer program, the copyright shall not be infringed if "a copy so made is intended exclusively for personal or private purposes".<sup>352</sup> The intention of the exceptions of protection is to find a balance between the rights of the author on the one hand and to provide a fair and equitable way of allowing others to refer to works protected by copyright on the other hand.<sup>353</sup> The Act does not provide a definition of "fair dealing", but the term is expressly used and open for interpretation.<sup>354</sup> Generally, the use of the work must be "fair".<sup>355</sup> Regarding literary and musical works the reproduction should not be in conflict with a

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<sup>348</sup> Smith, *Copyright Companion*, p. 51-55, 63-66, 80-81, 84-85.

<sup>349</sup> Section 22 of the Act.

<sup>350</sup> Dean, *Handbook of South African Copyright Law*, p. 1-51; see for example sections 12(1), 15(4) and 19B(1) of the Act.

<sup>351</sup> Sections 12(1)(a), 15(4) and 19A of the Act.

<sup>352</sup> Section 19B(2)(a) of the Act.

<sup>353</sup> Smith, *Copyright Companion*, p. 52.

<sup>354</sup> For example in section 12 of the Act: "Copyright shall not be infringed by any fair dealing with a literary or musical work".

<sup>355</sup> For example in the United States there are four factors to consider whether a fair use defence exists: the purpose and character of the accused use; the nature of the copyrighted work; the importance of the portion used in relation to the copyrighted work as a whole; and the effect of the accused use on the potential market for or value of the copyrighted work, see 17 U.S.C.A.

normal exploitation of the work and is not unreasonably prejudicial to the legitimate interests of the owner of the copyright.<sup>356</sup>

As described above, reproductions mainly take place in the RAM of a user's computer during the browsing through the Web. Browsing through free available Web sites is often most likely for the purpose of personal enjoyment or sometimes an incidental use, rather than for any commercial gain. Naturally it might also be for the purpose of research or private study, especially if the user browses through Web sites that requires prior authorisation, in other words, where the public is not invited to view the site freely, such as the law database *Lexus Nexus*. The exception would therefore appear clearly applicable to a user storing the material of a Web site in his RAM or downloading it onto hard disc. This is probably the most significant permitted act for users browsing through the Web or storing material of Web sites on their computer. Without this exception, the users would not be able to browse legally through the Web. Copyright owners, who are not willing to offer their works freely on the Web, are therefore forced to limit the access to their Web sites or take technical precautions. Some examples will be introduced above.

The research and private study exemption applies only to one's own study and not to make private study possible for third parties, in other words, only to the user who browses through the Web and not to the provider who stores material on his Web site.<sup>357</sup> Web site owners might therefore claim fair dealing with regard to literary and musical works for the purpose of, for example, criticism, review, reporting current events and quotation.<sup>358</sup> Regarding these exemptions, the question has to be asked how much of a work can be used.<sup>359</sup> In an United State case about posting the published and unpublished works of L Ron Hubbard on a bulletin board, the party who made the posting was held unentitled to a fair use defence although he had added to the texts

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<sup>356</sup> Section 13 of the Act.

<sup>357</sup> MacQueen, *Copyright and the Internet*, p. 87.

<sup>358</sup> Sections 12(1)(b), (c) and (3) of the Act.

<sup>359</sup> For example for the purpose of quotation it is provided in section 12(3) of the Act "that the quotation shall be compatible with fair practice, that the extent thereof shall not exceed the extent

some criticisms of Hubbard's doctrines, in consequence of the very small amount of commentary compared to the quantity of copied text.<sup>360</sup>

On the international level limitations and exceptions are provided by the two WIPO Treaties and article 13 of the TRIPS-Agreement. The wording of article 9(2) of the Berne Convention, the so-called three-step test, was adopted. Article 10 of the WIPO Copyright Treaty reads as follows:<sup>361</sup>

(1) Contracting Parties may, in their national legislation, provide for limitations of or exceptions to the rights granted to authors of literary and artistic works under this Treaty in certain special cases that do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the author.

(2) Contracting Parties shall, when applying the Berne Convention, confine any limitations of or exceptions to rights provided for therein to certain special cases that do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the author.

Furthermore article 5(3) of the EC Directive permits member states to adopt limitations to the rights of reproduction and of communication making available to the public for several fair use purposes, such as teaching or scientific research for non-commercial purposes.<sup>362</sup> Article 5(4) of the EC Directive provides that in all cases, the limitations "shall only be applied to certain specific cases and shall not be interpreted in such a way as to allow

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justified by the purpose ...".

<sup>360</sup> *Religious Technology Center v Lama*, at <http://www.bna.com/e-law/cases/lerma.html> (visited June 1999).

<sup>361</sup> Article 16 of the WIPO Performances and Phonograms Treaty reads as follows: (1) Contracting Parties may, in their national legislation, provide for the same kinds of limitations or exceptions with regard to the protection of performers and producers of phonograms as they provide for, in their national legislation, in connection with the protection of copyright in literary and artistic works.

(2) Contracting Parties shall confine any limitations of or exceptions to rights provided for in this Treaty to certain special cases which do not conflict with a normal exploitation of the performance or phonogram and do not unreasonably prejudice the legitimate interests of the performer or of the producer of phonograms.

<sup>362</sup> Article 5(3) of the EC Directive.

their application to be used in a manner which unreasonably prejudices the rightholders' legitimate interests or conflicts with the normal exploitation of their works or other subject matter."

However, neither the WIPO Treaties nor the EC Directive provide a useful answer to the problems arising with the fair dealing of a work on the Internet. The limitations and exemptions are only allowed to be applied "in certain special cases", which is left open for interpretation to each member country. The WIPO Treaties and the EC Directive are only providing a frame within the limitations and expectations "do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the author." This wording is similar to that in the South African Copyright Act. Online activity, however, requires a more precise wording and a classification of the "certain special cases". In the United States, the fair use doctrine is applied with respect to four factors:<sup>363</sup> The first statutory fair use factor looks to "the purpose and character of the use, including whether such use is of a commercial nature or is for non-profit educational purposes."<sup>364</sup> The second statutory fair use factor looks to "the nature of the copyrighted work".<sup>365</sup> The third statutory fair use factor looks to "the amount and substantiality of the portion used in relation to the copyrighted work as a whole."<sup>366</sup> And, finally, the fourth statutory fair use factor looks to "the effect of the use upon the potential market for or value of the copyrighted work."<sup>367</sup> The emphasis on the economic rights of copyright owners in the statutory language is clear. The courts' interpretation of it was that all commercial uses are to be presumed unfair.<sup>368</sup> South African courts facing the question of the fair dealing clause with regard to the use of a work on the Internet could apply a similar scheme of those four factors. Although the American Act refers to "fair use" whereas the South African Act uses the term "fair dealing" it is submitted that for the

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<sup>363</sup> See also Litsey, *Copyright and the Free Flow of Information*, p. 8; Dean, *Handbook of South African Copyright Law*, p. 1-52.

<sup>364</sup> 17 U.S.C. 107(1).

<sup>365</sup> 17 U.S.C. 107(2).

<sup>366</sup> 17 U.S.C. 107(3).

<sup>367</sup> 17 U.S.C. 107(4).

<sup>368</sup> Fujita, *The Great Internet Panic: How Digitization is Deforming Copyright Law*, p. 3.

present purpose the two terms are synonymous.<sup>369</sup> The exceptions in sections 12-19B of the Act also consider the "purpose of the use",<sup>370</sup> the "nature of the copyrighted work",<sup>371</sup> the "amount and substantiality of the portion used",<sup>372</sup> and the effect of the use upon the potential market for or value of the copyrighted work".<sup>373</sup>

Specifically, the Act should consider the following provisions:

- In section 12(1)(a) of the Act, it should be clarified that digital reproduction, i.e. making a single digital copy of a work for the purposes of research or private study, or the personal or private use is permissible without the author's consent, provided that a personal copy of the work is used as the model for the reproduction. Only personal making of copies, not making by another person should be permissible.
- Section 12(1)(c) of the Act should be broadened to include the purpose of reporting current events "(iii) by means of digital transmission."
- Sections 12(6) and 12(7) of the Act should be broadened to include expressions of opinion (articles, commentaries, news and news of the day) made available online, for example, by amending a subsection (10)(b), stating: "The provisions of subsections (6) and (7) shall apply also with reference to a work or an adaptation thereof by communication to the public", i.e. including online reporting, provided that the legitimate interests of the author are not prejudiced thereby.
- Section 12(4) of the Act should be extended to cover any kind of teaching by deleting the words "sound or visual record" in the field of intangible use of works. At the same time not only
- Section 12(8) of the Act should be broadened to include speeches about questions of the day that are made available to the public online,

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<sup>369</sup> Dean, *Handbook of South African Copyright Law*, p. 1-52.

<sup>370</sup> For example in sections 12(1)-(4), (6)(a) and 19B(2)(a)-(b) of the Act.

<sup>371</sup> Depending on the nature of the work, the Act provides different exceptions from protection, see sections 12 - 19B of the Act.

<sup>372</sup> Section 12(3) of the Act, for example, states that the extent of the quotation from a work "shall not exceed the extent justified by the purpose."

<sup>373</sup> Section 13 of the Act, whereas a reproduction is only permitted, if "the reproduction is not in conflict with a normal exploitation of the work".

and distribution of such speeches on data carriers could also be permitted.

- For the purpose of clarification, section 12(11) of the Act should include the term "digital", for instance " ... the right to use the work in question either in its original language, in a different language or digital".
- Sections 14 and 16 of the Act should be broadened to include data carriers, such as RAM or the hard disk of a computer. Furthermore sections 14(1)(a), (2)(b), (4), (5)(b) of the Act should include the making available to the public of a work.
- Section 15 of the Act should be broadened to include the inclusion of artistic works in digital transmissions.
- The uses of a digital work in library and archives must be reconsidered. Libraries in particular wish to lend not only analogue books but also to participate in digital information transmission.<sup>374</sup> Inter-library databases promise huge cost savings through the use of electronic materials, however, the use of the digital work will always involve copying.<sup>375</sup> Presently the South African Copyright Forum (SACFO) debates this issue.<sup>376</sup>
- The fair dealing principle should be extended for certain performances or displays of copyrighted works for instructional activities performed by government or non-profit educational institutions, to cover the distribution of a work over a computer network (so-called distance education).
- The fair dealing principle in the course of computer maintenance repair should also be considered. After holding that copying a computer program into RAM in the course of turning on and running the machine constitutes a "reproduction" in the meaning of the Act, a service technician who is not the owner or licensee of the system software commits copyright infringement by even booting up the machine for maintenance or repair.

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<sup>374</sup> Dreier, *Copyright Law and Digital Exploitation of Works*, p. 4.

<sup>375</sup> Schweighofer, *Downloading, Information Filtering and Copyright*, p. 132..

<sup>376</sup> At present, no further information is available on their Web site at <http://pgw.org/sacfo> (visited June 1999).

- Finally acts of reproduction that are necessary for the use of protected works in digital form by a lawful user, such use being in accordance with their intended purpose, should not be subject to the authorisation of the rights holder.

#### (b) Implied Licence

If an author offers a work on a Web page, he submits itself to the technical conditions of the Internet and wants to use its functionality. In most cases, it is in the interest of an author that others are "visiting" his Web site. Therefore the exception of an implied licence is founded on the assumption that anyone who places material on the Web consents to its use in foreseeable manners.<sup>377</sup> Arguably, the author would not have placed his material on the Web if he did not want others to access it. Most commentators therefore agree upon the idea that by posting material on the Internet, authors of Web sites implicitly licence users to make the temporary RAM copy necessary to view the file in a browser.<sup>378</sup> But can the implied licence go beyond access to cover also other otherwise infringing acts, such as downloading material or printing out? This is more debatable, although again in the absence of express prohibition or security measures by the Web site owner, such activities should normally be treated as authorised. Because in case the author does not, he or her will provide means to select the number of visitors of their page, for instance by demanding remuneration or a password. However, it is clear that an author can choose not to enforce his rights and make his work freely available. This does not mean, however, that he has legally waived his right and that his work is not covered by copyright, nor does it mean that the work is in the public domain. An implied licence depends on the author's intent. Unless the material is deemed to be in the public domain, there is no implied licence without the author's explicit or implicit consent. An

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<sup>377</sup> Effross, *Rights, Rules and Remedies for Unwelcomed Web-Linking*, p. 670.

<sup>378</sup> Effross, *Rights, Rules and Remedies for Unwelcomed Web-Linking*, p. 670; Jakab, *Facts and Law of Web Linking*, p. 12; MacQueen, *Copyright and the Internet*, p. 89.

Australian case, *Trumpet Software (Pty) Ltd v OzEmail (Pty) Ltd*,<sup>379</sup> shows how far a court may be prepared to go with the concept of an implied licence. The defendants were held entitled to bundle the plaintiffs' software with their own and distribute it commercially over the Internet against the plaintiffs' wishes, because the software had been originally marketed as "shareware", that is, as available for free use and reproduction. This has obvious significance for the Internet because so many of those putting material up believe it to be a community rather than an area of sharply defined and fenced property rights. But the Australian court did draw limitations upon the implied licence, holding that the redistribution was only to be of the entire software, without any adjustment to the original product.<sup>380</sup>

In one of the leading cases in the United States on implied licences, *Effects Associates, Inc v Cohen*,<sup>381</sup> the Ninth Circuit observed that although the Copyright Act generally requires a "transfer of copyright ownership" to be in writing, nonexclusive licences are specifically exempted from the definition of such transfers. The court also noted an authoritative treatise's recognition that "nonexclusive licences may be granted orally, or may even be implied from conduct." Thus, the court held that a special effects company that delivered specially commissioned footage to a filmmaker without also supplying a written licence or assignment had granted an implied non-exclusive licence to the filmmaker to use the footage.

Under the South African Copyright Act, section 22(4) of the Act provides that a "non-exclusive licence to do an act which is subject to copyright may be written or oral, or may be inferred from conduct, and may be revoked at any time". On the Internet there is usually no "contact" between the user of a work and the author thereof. Therefore the granting of an implied licence must be seen in context with "inferred from conduct". However, courts have not established whether such licence is provided for in the Act but rather

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<sup>379</sup> (1996) 18(12) EIPR 69.

<sup>380</sup> *Trumpet Software (Pty) Ltd v OzEmail (Pty) Ltd*, (1996) 18(12) EIPR 69.

<sup>381</sup> See Effross, *Rights, Rules and Remedies for Unwelcomed Web-Linking*, p. 675, referring to this case

supposed it to exist.<sup>382</sup> A non-exclusive licence can be revoked at any time but if granted by a contract, the grantor cannot revoke it or his successor except in accordance with the contract or as provided in a further contract.<sup>383</sup> If there is no contract or if the author does not provide any technical measures to prevent others from visiting his material on the Internet, it can be assumed that he implicitly licence users to make the temporary RAM copy necessary to view the file in a browser. A solution could be the digital equivalent to a so-called "shrink wrap" licence which are utilised in connection with the exploitation of computer programs. A shrink wrap licence is a printed standard form of agreement to bind the purchaser of the copy of the computer program to its terms upon his breaking and opening the plastic or cellophane wrapper.<sup>384</sup> The digital equivalent of a shrink wrap is a so-called "Web-wrap" agreement.<sup>385</sup> Before a user can access the content of a Web site, he has to read the specific terms and conditions of the agreement, and click on a "I agree" button.

#### **4.2.1.9 Use of Technology to Protect Intellectual Property**

As suggested above, copyright owners, who are not willing to offer their works freely on the Web, are forced to limit the access to their Web sites or take technical precautions. Admittance is restricted, for example, to those who have prior clearance. This restriction may be accomplished by requiring the user to provide a user-name and a password,<sup>386</sup> and/or by requiring payment for use of the Web page. Technical protection can be reached with the use of encryption schemes,<sup>387</sup> the "clipper chip" and the key escrow system,<sup>388</sup> or

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<sup>382</sup> See, for instance, *Frank&Hirsch (Pty) Ltd v Roopanand Brothers (Pty) Ltd*, 1993 (4) SA 279 (A) at 292 B.

<sup>383</sup> Dean, *Handbook of South African Copyright Law*, pp. 1-84 and 1-85.

<sup>384</sup> Dean, *Handbook of South African Copyright Law*, p. 1-86.

<sup>385</sup> Effross, *Rights, Rules and Remedies for Unwelcomed Web-Linking*, p. 675.

<sup>386</sup> Passwords have been used for years and are effective for services such as the law database Lexus Nexus where access is granted only to those who pay for the service. See Dreier, *Copyright Law and Digital Exploitation of Works*, p. 20 and 21.

<sup>387</sup> Encryption performs a series of mathematical calculations based on a key (like a secret password) on the data to be scrambled. Once the data is encrypted, it can be transferred to users in an unreadable manner format. Then the user's computer which knows the key can decrypt the data by reversing the series of calculations used to encrypt the data. Protection is only guaranteed,

digital fingerprints.<sup>389</sup> Although these copyright protection technologies likely will prevent much infringement in the future, they are unlikely to prevent, for example, the scanning onto the Internet of hard copy images.<sup>390</sup>

Furthermore incorporated data prevent second copies being made from a first copy with the help of Serial Copyright Management Systems (SCMS).<sup>391</sup> Or other software can be incorporated into the transferred data, which limits the number of digits that can be copied or prevents copies being made at all.<sup>392</sup> At present, however, there are still a number of countries, which restrict the use of SCMS either by way of criminal, military, or telecommunications law.<sup>393</sup> A solution against copyright infringement may be a Digital Object Identifier (DOI) system.<sup>394</sup> The DOI system is a new identification system used to provide identification for digital content. The directory of the system provides a way to link users of the materials to the copyright owners, even when digital content changes ownership or location. The DOI system seems ideal to protect copyrighted works and facilitate information transaction, however, it is still in an experimental stage.<sup>395</sup> Another technical solution to control copyrighted works on the Internet may be the so-called header-based system.<sup>396</sup> A header is an electronic tagging of a digitised work. Headers can be used to control access and use of copyrighted works at the user's computer. Headers provide

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however, until someone discovers the key. See Lee, *Toward a More Balanced Online Copyright Policy*, p. 52.

<sup>388</sup> For details about how clipper chips and key escrow systems operate, see A. Michael Fromkin, *It Came from Planet Clipper: The Battle Over Cryptographic Key Escrow*, Law of Cyberspace Issue, U. Chi. Legal F. (Feb. 8, 1998), at <http://www.law.miami.edu/~froomkin/articles/clipper.htm> (visited Nov, 1998).

<sup>389</sup> Software can be written that will only function if the user has the proper password, or that discontinues functioning if it is an illegal copy. For example disks with PROLOK technology have a fingerprint (a small mark physically placed on the magnetic surface of each disk and containing information that cannot be altered or erased) which interacts with the computer to determine if the disk is an original or a copy. The computer will not read the program into its memory if it does not have the proper fingerprint, see NetActive, Issue 6, 1999, p. 18; Lawrence/Lobsenz, *Software on the Internet Invites Piracy*, p. 2.

<sup>390</sup> McCabe, *Internet Copyright Infringement*, p. 1.

<sup>391</sup> Bechtold, *Multimedia und das Urheberrecht* (Multimedia and Copyright), p. 30; Dreier, *Copyright Law and Digital Exploitation of Works*, p. 21.

<sup>392</sup> Dreier, *Copyright Law and Digital Exploitation of Works*, p. 21.

<sup>393</sup> Bechtold, *Multimedia und das Urheberrecht* (Multimedia and Copyright), p. 30.

<sup>394</sup> See DOI Foundation, *About the Digital Object Identifier*, at [http://www.doi.org/about\\_the\\_doi.html](http://www.doi.org/about_the_doi.html) (visited Dec, 1998).

<sup>395</sup> Lee, *Toward a More Balanced Online Copyright Policy*, p. 56.

<sup>396</sup> See DOI Foundation, *About the Digital Object Identifier*, at

information about the copyright such as the permitted use, the permission information, authentication of site address, the price for each type of use, or the copyright owners electronic address to identify and provide protection for copyrighted works.<sup>397</sup> It is necessary to wait and see whether in future so-called "software agents" will search the entire global network for authorised and unauthorised usage of works, communicate the relevant information to rights holders and, where necessary, block or even destroy unauthorised data packages.<sup>398</sup> Further technical precautions will be introduced below within the examination of Web linking.

#### **4.2.2 Indirect or Secondary Infringement**

In addition to the various types of copyrights above, the South African copyright law guarantees the copyright owner protection against various acts that are performed in relation to "infringing articles". The Act categorises certain activities, which encompass dealing with infringing copies as indirect or secondary infringement.<sup>399</sup> These acts require an infringing knowledge of the acting person, this means that the acts must be performed with the knowledge that "infringing articles" are concerned.<sup>400</sup> Under section 23(2) of the Act infringement arises if that person without the licence or permission of the copyright owner and at a time when copyright subsists:

- (a) imports an article into the Republic for purpose other than for his private and domestic use;
- (b) sells, lets, or by way of trade offers or exposes for sale or hire in the Republic any article;

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[http://www.doi.org/about\\_the\\_doi.html](http://www.doi.org/about_the_doi.html) (visited Dec, 1998).

<sup>397</sup> See DOI Foundation, *About the Digital Object Identifier*, at [http://www.doi.org/about\\_the\\_doi.html](http://www.doi.org/about_the_doi.html) (visited Dec, 1998).

<sup>398</sup> Van Der Merwe, *Copyright and Computers: With Special Reference to the Internet*, p. 183; Dreier, *Copyright Law and Digital Exploitation of Works*, p. 22.

<sup>399</sup> Sections 23(2) and (3) of the Act.

(c) distributes in the Republic any article for the purpose of trade, or for any other purpose, to such an extent that the owner of the copyright in question is prejudicially affected; or

(d) acquires an article relating to a computer program in the Republic.<sup>401</sup>

The characterisation of transmissions of copyrighted works over digital networks was the key issue in the debate over international copyright protection.<sup>402</sup> The United States White Paper's discussion of transmission of works, for example, focussed primarily on the right of distribution,<sup>403</sup> and the right of reproduction.<sup>404</sup> The EC Directive suggested that point-to-point transmissions of works on digital networks fall under the right holder's exclusive rental right.<sup>405</sup> The main problem to be seen in context with indirect or secondary infringement and the classification of a transmission of copyrighted works over a digital network under the South African copyright law remains to be the fact that these infringements are associated only with tangible copies. Under the Act, the reader of section 23(2) of the Act is confronted with the import, sell, let, offer, sale, hire, distribution or acquisition of an "article". Infringement by dealing in infringing copies would seem to require hard rather than electronic copies.

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<sup>400</sup> Smith, *Copyright Companion*, p. 23; see also section 23(2) of the Act.

<sup>401</sup> Sections 23(2)(a)-(d) of the Act.

<sup>402</sup> See in general the U.S. Report of the Working Group on Intellectual Property Rights, Intellectual Property and the National Information Infrastructure (1995) and The ECC's Copyright and Information Society Green Paper on Copyright and Related Rights in the Information Society, COM(95).

<sup>403</sup> The Report of the Working Group on Intellectual Property Rights, Intellectual Property and the National Information Infrastructure, p. 213-217.

<sup>404</sup> The Report of the Working Group on Intellectual Property Rights, Intellectual Property and the National Information Infrastructure, p. 64.

<sup>405</sup> EC Directive, p. 53-59. Article 1(2) of the Directive on Rental and Lending Rights and on Certain Rights Related to Copyright in the Field of Intellectual Property defines "rental" as "making copyrighted works available for use for a limited time and for commercial advantage." This view was criticised, arguing that the Rental Right Directive's legislative history suggests that the rental right was associated only with tangible copies, see Lewinski, *The EC Commission's Proposal for a Council Directive*, p. 117, 119. The extension of rental rights to electronic forms of distribution was also criticised by the Commission Legal Advisory Board (LAB), *Reply to the Green Paper on Copyright and Related Rights in the Information Society*, at <http://www2.echo.lu/legal/en/ipr/reply/reply.html> (visited March 1999), arguing that the rental right approach is "methodologically and conceptually flawed" because rental right is part of, or exception to, distribution right. As online transmissions do not implicate the distribution right, they should not affect the rental right.

#### **4.2.2.1 Importation of an "Article"**

Section 23(2)(a) of the Act provides that a person infringes copyright who "imports an article into the Republic for a purpose other than for his private and domestic use". In detail it is required, that a reproduction or adaptation of a relevant work was made outside the Republic, and this act would have constituted an infringement if made within South Africa.<sup>406</sup> Finally, the "infringing article" has to be imported into the Republic with the knowledge of the acting person that "infringing articles" are concerned.<sup>407</sup>

The term "importation" is not defined in the Act, but the requirement that copies of a work be acquired outside the Republic might suggest that "importation" means the movement of "physical" copies into the Republic.<sup>408</sup> Under the copyright law of the United Kingdom, import means "bring into".<sup>409</sup> It is thought that an article is imported when it is brought from abroad into port or, in the case of carriage by aircraft, landed.<sup>410</sup> According to this interpretation one might assume, that section 23(2)(a) of the Act was drafted with a model of physical copies in mind, for example parallel importation of grey market goods made outside the Republic, such as CDs or books.<sup>411</sup>

An importation in the Republic could take place during a transmission of a work on the Internet. However, the interpretation of the term "importation" is hardly compatible to Internet transmissions into the Republic, with respect to which no physical copies in a traditional sense, or "articles" as expressly used in section 23(2) of the Act, are moved across national borders. What crosses borders on the Internet are different data packets containing bytes until they are finally reassembled at the recipient's computer. As described above, a digital work would fall within the definition of a material work, as long as it is stored on a material form, such as any storage device. To the same result

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<sup>406</sup> Dean, *Handbook of South African Copyright Law*, p. 1-45; Smith, *Copyright Companion*, p. 23.

<sup>407</sup> Dean, *Handbook of South African Copyright Law*, p. 1-45.

<sup>408</sup> Section 23(2) of the Act expressly uses the term "article".

<sup>409</sup> Garnett & others, in Copinger and Skone James on Copyright, First Supplement, 9-16.

<sup>410</sup> Garnett & others, in Copinger and Skone James on Copyright, 9-16; referred to *Wilson v Chambers & Co Pty Ltd* (1926) 38 C.L.R. 138.

leads the interpretation of the term "article" in section 23(2)(d) of the Act, which provides the acquisition of an article relating to a computer program. It is held that this "article" could include a disc or tape bearing a computer program.<sup>412</sup> Therefore it can be assumed that a computer program, hence the source code, has also to be "fixed" on a material form, unless it provides the requirements of being an "article". During a transmission on the Internet, however, the work is not transmitted entirely stored on a storage device. The transmission is a transitory stream of 1's or 0's travelling in separate data packets over the Internet, which possibly arrive at their destination by different routes, such as wires and satellites.<sup>413</sup> A transmission only starts with a copy and ends with a copy, such as the storage on a hard disk or a print out. The transitory stream of bytes in between, however, is not comparable with the definition of an "article" used in section 23(2) of the Act.

Another problem is, that there is no person who imports the article in a traditional way. The infringing article might be stored and made available in a foreign country, but there is no person bringing the article into the Republic. The article is usually "imported" because of the user's request, for example, browsing or downloading. As described above, the "importation" on the Internet is a transitory stream of data transmitted over wires and satellites, hence a mere technical transmission of data. Thus, the traditional importation right does not apply to network transmissions into South Africa.

An importation of an article is only conceivable with regard to the uploading of a work. This might be the case, if a user in a foreign country accesses a South African server, for example a bulletin board, and uploads infringing articles with his knowledge. Although the transmission of a copy lead to the reproduction of a further copy at the receiving end, the transmission starts and ends with a copy, and therefore should embody a copy just like any other

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<sup>411</sup> Dean, *Handbook of South African Copyright Law*, p. 1-45; Smith, *Copyright Companion*, p. 23.

<sup>412</sup> Smith, *Copyright Companion*, p. 24.

<sup>413</sup> Cover, *The Emperor's Magic Suit: Proposed Legislation Will Tailor the Copyright Law to Fit the Internet*, p. 2.

traditional medium. Thus, section 23(2)(a) of the Act should be amended to include importation *by transmission of copies*.

#### **4.2.2.2 The Distribution of an "Article"**

A person infringes the copyright of the owner if he "distributes in the Republic any article for the purposes of trade, or for any other purpose, to such an extent that the owner of the copyright in question is prejudicially affected".<sup>414</sup> With regard to transmissions on the Internet section 23(2)(c) of the Act, as sections 23(b) and (d) of the Act, should include the term "copies", because an "article" was not held to be transmitted over the Internet. However, the question still has to be answered, whether a transmission of a work on the Internet can be classified as a "distribution" of a copy.

A distribution, in relation to a programme-carrying signal, means "any operation by which a distributor transmits a derived signal to the general public or any section thereof".<sup>415</sup> This transmission solely refers to the distribution of broadcast. But can broadcast constitute a distribution of a copy? With respect to Internet transmissions, however, a complete copy of a work ends up on the recipient's computer. Therefore it could be concluded that a copy has been distributed.<sup>416</sup> However, it is less clear whether other types of transmissions constitute distributions of copies. For example, what about an artistic work that is transmitted and simultaneous performed live at the recipient's end? Although the performance right may be implicated, has there been a distribution of a copy that would implicate the right of distribution? Even if a copy is deemed to have been distributed in the course of an Internet transmission of an infringing work, difficult questions will arise

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<sup>414</sup> Section 23(2)(c) of the Act.

<sup>415</sup> Section 1(1) *sv* "distribution" of the Act. Under section 1(1) of the Act a programme-carrying signal "means a signal embodying a program which is emitted and passes through a satellite". A derived signal is defined under section 1(1) of the Act as "a signal obtained by modifying the technical characteristics of the emitted signal, whether or not there have been one or more intervening fixations".

<sup>416</sup> Cover, *The Emperor's Magic Suit: Proposed Legislation Will Tailor the Copyright Law to Fit the Internet*, p. 2.

as to who should be treated as having made the distribution: the person who posted the unauthorised work on the Internet, the online provider or bulletin board server through which the work passes, the recipient, or some combination of the foregoing? In the United States several decisions, for example, have addressed the question of whether the mere posting of a work on a bulletin board server or other Internet sites from which it can be downloaded by members of the public constitutes a public distribution of the work. It was then stated, that an Internet service provider who allows access to a bulletin board service can distribute an image by allowing the user to download the image.<sup>417</sup> However, the liability of online providers and bulletin board servers will be analysed below.

Infringement by distribution is not intended to extend only to the case where the distribution involves sale or hire of products.<sup>418</sup> Any trade distribution, even in the form of distribution of free samples or other non-profit activity is intended to fall within the ambit of section 23(2)(c) of the Act provided that the distribution prejudicially affects the owner of the copyright.<sup>419</sup> If material is distributed free, as much of it is on the Internet, there is no sale or hire. Furthermore it is unclear what a "letting" or "hiring" means on the Internet. For example, is a download of a on-demand video a hiring? In a sense, the user pays a hiring fee to watch the video only once. However, the downloaded bytes of information comprising the movie are never "returned" to the owner, as in the case of the usual hiring of a copy of a video.

With regard to an amendment of section 23(2)(c) of the Act, the right of distribution should also include the term "transmission". The term "transmission" should be defined as "the distribution of a reproduction by any device or process whereby a copy of the work is fixed beyond the place from which it was sent", to expressly recognise that copies of works can be distributed to the public by transmission, and that such transmissions fall within the exclusive distribution right of the copyright owner.

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<sup>417</sup> Cahoy, *New legislation regarding on-line service provider liability for copyright infringement*, p. 8

<sup>418</sup> Smith, *Copyright Companion*, p. 24.

<sup>419</sup> Smith, *Copyright Companion*, p. 24.

### **4.2.2.3 Publication by Performance**

In respect of publication by performance, the Act provides that the copyright of a literary or musical work shall be infringed by any person who permits a place of public entertainment to be used for a performance in public of the work where the performance constitutes an infringement of the copyright of the work.<sup>420</sup> However, this provision does not apply in the case where the person permitting the place of public entertainment was not aware and had no reasonable grounds for suspecting that the performance would be an infringement of the copyright.<sup>421</sup> Such a place could be, for example, an Internet Café that offers Internet access to the general public. A visitor (user) becomes a member by paying a small amount of charge. As discussed above, it is argued that a performance would not be to the public if the audience is part of a private gathering or a gathering of specific members of a business.<sup>422</sup> But if members of the general public have reasonable freedom of access to the performance, even as paying guests, this could be seen as a performance in public.<sup>423</sup> This would certainly include an Internet Café.

### **4.2.2.4 Interim Comment**

If works become widespread accessible on the Internet, copyright problems are raised. The advent of digital technology has overturned the underlying assumptions of the original law. As described above, any transmission of a copyright work over the Internet results in the creation of at least a transient copy at the receiving end, and possibly further transient copies in between.<sup>424</sup>

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<sup>420</sup> Section 23(3) of the Act.

<sup>421</sup> Smith, *Copyright Companion*, p. 24; referring to *Performing Rights Society Ltd v Cyril Theatrical Syndicate* 1924 (1) KB. Smith is also stating that "it is clear that" section 23(3) of the Act "is not intended to apply to the persons, such as theatre or discotheque owners, who permit a place to be used for the performance." This statement must be seen critical, because such persons have preceding possibilities to check the legality of the performance and practical control is present because the owner can easily monitor the event. See also *Performing Rights Society Ltd v Berman and Another*, 1966 (2) SA 355 (R); Dobbins, *Computer Bulletin Board Operator Liability*, p. 226.

<sup>422</sup> Alan Smith, *Copyright Companion*, p. 50

<sup>423</sup> Alan Smith, *Copyright Companion*, p. 50.

<sup>424</sup> Dreier, *Copyright Law and Digital Exploitation of Works*, p. 11.

This characteristic of digital works on a network, that they must be transmitted in order to be perceived, is an attribute of the new network technology that does not precisely fit into the currently defined statutory rights of copyright owners. Yet within the sphere of intangible communication of a work, the act of making a protected work available on the Internet is difficult to categorise.<sup>425</sup>

It remains questionable if an amendment of section 23(2) of the Act with regard to the character of the Internet would be a proper solution. This is in question, because the character and function of the Internet is hardly compatible with the terms being used in section 23(2) of the Act. The right of distribution arguably forces individuals to wrongly conceptualise online service providers as physical distributors of copyrighted matter, instead of access providers to data files. In the United States commentators have already proposed the replacement of the exclusive right of distribution,<sup>426</sup> with an exclusive right to control access to copyrighted works.<sup>427</sup> Furthermore a study of the Max Planck Institute for Foreign and International Patent, Copyright and Competition Law, Munich/Germany, commissioned by the Friedrich Ebert Foundation to analyse the effects of new technologies on copyright law and to pinpoint the areas in which the legislature is called upon to react, concludes that "the right to make protected works available for delayed (interactive) access via digital networks should not be granted through analogous application of the right of material distribution or by applying the rental and/or lending right."<sup>428</sup>

Instead of amending section 23(2) of the Act, it might therefore be more suitable to contemplate a slight deviation from existing copyright concepts and consider a right of access as an alternative to the distribution right. The right

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<sup>425</sup> Dreier, *Copyright Law and Digital Exploitation of Works*, p. 11.

<sup>426</sup> Under 106(3) of the U.S. Copyright Act, the owner has the exclusive right to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending.

<sup>427</sup> Olswang, *Accessright: An Evolutionary Path for Copyright into the Digital Era?*, p. 217; Morano, *Legislating in the Face of New Technology: Copyright Laws for the Digital Age*, p. 1419, 1420.

<sup>428</sup> See Dreier, *Copyright Law and Digital Exploitation of Works*, p. 12.

could be called a "right of intangible transmission", or "right of intangible making available", or simply "transmission right". The contents of the right would be described as "the right to make available to the public protected works, by wire or wireless means, in such a way that members of the public may access them," in accordance with the wording of article 8 of the WIPO Copyright Treaty.<sup>429</sup> This new "transmission right" would comprise of the difficulties arising within the application of section 23(2) of the Act to the character of transmissions on the Internet.

### 4.2.3 Moral Rights

Copyright law protects not only the material interests of an author in his or her work, it also protects his or her intellectual and personal relations to the work, in short, his or her ideal interests.<sup>430</sup> These moral rights, which are based on author's rights to control the moral character of their works, provide creators with additional controls over their materials which economic rights do not offer.<sup>431</sup> Moral rights can only subsist in the work if copyright subsists in it and they endure for the term of copyright in the work or the lifetime of the author.<sup>432</sup> Under section 20(1) of the Act, the author has the right to claim authorship of the work (recognition of authorship) and the right to object to any distortion, mutilation or other modification of the work.<sup>433</sup> Any infringement of the provisions in section 20 of the Act shall be treated as an infringement of

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<sup>429</sup> Article 8 of the WIPO Copyright Treaty (right of communication to the public) reads as follows: "Without prejudice to the provisions of ..., authors of literary and artistic works shall enjoy the exclusive right of authorizing any communication to the public of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access these works from a place and at a time individually chosen by them."

<sup>430</sup> Countries that embrace the economic rationale for copyright law, like the United States, United Kingdom and South Africa, base copyright legislation on an individual's economic incentive to create copyrightable works. The South African Copyright Act, however, also recognise, in addition to economic rights, moral rights which are listed in section 20(1) of the Act.

<sup>431</sup> Dean, *Handbook of South African Copyright Law*, p. 1-61.

<sup>432</sup> Dean, *Handbook of South African Copyright Law*, pp. 1-62, 1-63.

<sup>433</sup> Section 20(1) of the Act is closely derived from article 6bis of the Berne Convention, which states: Independently of the author's economic rights, and even after the transfer of the said rights, the author shall have the right to claim authorship of the work and to object to any distortion, mutilation or other modification of, or other derogatory action in relation to, the said work, which would be prejudicial to his honour or reputation; see Dean, *Handbook of South African Copyright Law*, p. 1-61.

copyright under sections 23 to 28 of the Act.<sup>434</sup> It does not, however, deal with the exemptions or exclusions from copyright infringement, such as fair dealings with works.<sup>435</sup> The moral rights of the author continue to exist even after assignment of the exploitation rights to the work.<sup>436</sup>

Especially the digital format and the world-wide transmission of a work on the Internet raise the possibility to offend against the moral rights of a copyright owner. Digital technology enables the user to alter, adapt, distort and divide a protected work in almost any manner desired, to combine it with other works or part of works and to erase the author's name. If a user altered both the name of the author and the content of the work, it might be impossible to prove that the new work had any connection with the original beyond coincidental similarity.<sup>437</sup> Furthermore, a work can be altered in a manner likely to prejudice the legitimate personal interests of the author, or where the work is presented or perceived in a context that gravely conflicts with the author's intentions.<sup>438</sup> However, when material is placed on the Internet, the author might agree to certain types of modification such as dubbing, subtitling, reformatting etc.<sup>439</sup> The use of a computer program gives rise to some uncertainty in interpretation. As in case of modification of a computer program or a work associated with a computer program, the author may not prevent or object to modifications that are absolutely necessary on technical grounds or for the purpose of commercial exploitation of the work.<sup>440</sup> The terms "absolutely necessary" and for the "purpose of commercial exploitation" are described as extremely broad in scope.<sup>441</sup> A determination has to take place in each individual case. In general, a lack of legal protection with regard to the Internet can not be seen. Changes to the existing preventive powers of

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<sup>434</sup> Section 20(2) of the Act.

<sup>435</sup> Dean, *Handbook of South African Copyright Law*, p. 1-64.

<sup>436</sup> Section 20(1) of the Act. See also Dean, *Handbook of South African Copyright Law*, p. 1-61.

<sup>437</sup> Fujita, *The Great Internet Panic: How Digitization is Deforming Copyright Law*, p. 11.

<sup>438</sup> Dreier, *Copyright Law and Digital Exploitation of Works*, p. 6; Smith, *Copyright Companion*, p. 27.

<sup>439</sup> Fujita, *The Great Internet Panic: How Digitization is Deforming Copyright Law*, p. 9.

<sup>440</sup> Section 20(1) of the Act.

<sup>441</sup> Alan Smith, *Copyright Companion*, p. 27.

authors on the basis of their moral rights are therefore not necessary in the digital context.

### **4.3 Applying Copyright to Specific Acts on the Internet**

As examined above, the rights of the copyright owner are mainly applicable to the technical proceedings on the Internet. In the following, this dissertation examines the potential application of such rights to various actions on the Internet, such as caching, Web linking, operating an Internet service or bulletin board and the question of third-party liability, as well as how various traditional exemptions, such as fair dealing and the implied licence doctrine, may be interpreted regarding Internet activities.

#### **4.3.1 Caching**

As described above, caching involves the making of copies and therefore presents a problem of potential infringement of the right of reproduction. In addition, because copies of copyrighted works may be further distributed or performed from the cache server to members of the public, proxy caching may give rise to infringement of the right of performance and indirect or secondary infringement.

A copyright owner who has placed information on the Internet, usually desires such information to reach as many end users as fast as possible. Therefore he might have no incentive to assert its copyright rights against caching. In legal terms, caching would fall within the exemptions of protection of the copyright owner, such as fair dealing or an implied licence. However, due to the fact that material is not only temporarily stored on the cache, the copyright owner might already raise objections to a storage longer than a second.

#### **4.3.1.1 Specific Problems with Caching**

Generally, caching interferes with the ability to control the version of information that is delivered to the end-user. For example, a Web site may have been substantially improved, but an old version of material from the site may reside as a cache for weeks on the proxy server of an online provider where it is still accessible for users. This can raise several problems for the person who is liable for the content or for the end-user that rely on the information of that content. Many Web sites may contain time sensitive information, such as stock quotes,<sup>442</sup> news sites,<sup>443</sup> or sport scores.<sup>444</sup> If information is obtained from a cache rather than the original site, and the cache has not been refreshed recently, the user may obtain out of date information or information that is no longer accurate.<sup>445</sup> Furthermore, suppose the owner of a Web site is notified that his or her site contains infringing material. To avoid liability, the Web site owner may remove such material promptly. However, he would not be able to remove the infringing material of the caches. A problem of caching can also be seen in the loss of "page impressions" at the site, i.e. the number of times a page is "visited" by users.<sup>446</sup> Page impressions are often used as a measure for advertising charges. Web sites that are often viewed are considered prime real estate and are relatively costly sites at which to advertise. Accesses to cached versions of a Web site may not be counted as page impressions at the original site, which may lead to a loss in advertising revenues.<sup>447</sup> A Web site owner may also have contracted with different advertisers to display their advertising banner on his Web site for a limited time and one after another. If this site Web site is downloaded into a cache and is not refreshed continuously, users will see only one ad and may not see the other ads that the next advertisers paid to have displayed afterwards. Caching may also

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<sup>442</sup> See, for example, Salomon Smith Barney Access, at <http://www.smithbarney.com> (visited Feb. 1999).

<sup>443</sup> See, for example, CNN Interactive, at <http://www.cnn.com> (visited June 1999).

<sup>444</sup> See, for example, ESPN Sportszone, at <http://www.espn.sportszone.com> (visited June 1999).

<sup>445</sup> Hayes, *Advanced Copyright Issues on the Internet*, p. 69; Smith, *Internet Law and Regulation*, p. 32.

<sup>446</sup> Smith, *Internet Law and Regulation*, p. 32.

<sup>447</sup> Smith, *Internet Law and Regulation*, p. 32.

result in the loss of control over access to information at a site. For example, suppose a Web site owner desires to limit access to material on his site, an authorised user could enter the site, download the information to a proxy server, and then other, unauthorised users might be able to gain access to it through the cached information on the proxy server.<sup>448</sup>

However, because caching is inherently widespread on the Internet, a court may well look beyond the individual actions of a particular cache entity and assess the potential impact of caching on a copyright owner. This might be difficult to predict in advance, without knowing the particular circumstances of the caching that is being challenged. Although caching is *prima facie* an infringing act, it does not follow that all types of caching are necessarily so. Caching, as said, could fall in the fair dealing principle or there may be an implied licence to cache.

#### **4.3.1.2 Fair Dealing and Implied Licence**

Because of the specific problems of caching described above, the application of the exemptions of copyright protection is uncertain and has to be analysed in each case. A solution might also be the application of the above proposed four factors,<sup>449</sup> such as purpose and character of the use, nature of the copyrighted work, amount and substantiality of the portion used, and effect of use on the potential market. Because online providers, such as Internet service providers (ISP), seem the most likely targets for claims of infringement by copyright owners based on caching, the fair dealing question will be examined below from the perspective of an ISP performing proxy caching.

To the extent that Web pages are computer programs, the provision of section 19B of the Act in connection with browser caching may be relevant. Section 19B(2)(a) of the Act legitimises the making of back-up copies of a computer program by a person who is in lawful possession of that computer program, or

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<sup>448</sup> Hayes, *Advanced Copyright Issues on the Internet*, p. 66.

an authorised copy thereof. It might be arguable that a browser cache is the equivalent of a back-up copy of a traditional program. But would the making of that copy be "reasonably necessary" for back-up purposes?<sup>450</sup> This is in question, because the cache is used for the purpose of reducing the data flow on the Internet and to save time for the user. Thus, a copy on the cache may not be assumed as "reasonably necessary". Furthermore, the browser will often cache discrete elements of the Web site, such as graphic elements, which do not constitute a computer program.<sup>451</sup>

A court might therefore be hesitant to construe any implied licence from a copyright owner based on its posting of material for browsing on the Web to cover uses, such as caching, that cause harm to the owner. There may be an implied licence to cache, if the practice is widespread and generally accepted.<sup>452</sup> A person or entity providing a cache then had to demonstrate that the Internet could not function effectively without it so that the person putting the material on the public Internet must be taken to have consented it.<sup>453</sup> That would be a matter for expert technical evidence if the issue were litigated.

#### **4.3.1.3 Technical Solutions**

The caching problem may be solved by various technical solutions that allow the copyright holder to specify or control caching through technological means. For example, the Internet Engineering Task Force (IETF) is considering a revision to the basic Hypertext Transfer Protocol (HTTP), the common used protocol on the Web to request information from sites.<sup>454</sup> The revised protocol would allow the attachment of explicit directives to both requests and responses for information.<sup>455</sup> A content provider posting information to a server could mark the information "Public" (full permission to

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<sup>449</sup> See Chapter 4.2.1.8.

<sup>450</sup> See section 19B(2)(a) of the Act.

<sup>451</sup> Smith, *Copyright Companion*, p. 82.

<sup>452</sup> Smith, *Internet Law and Regulation*, p.32.

<sup>453</sup> Litsey, *Copyright and the Free Flow of Information*, p. 7.

<sup>454</sup> Bechtold, *Multimedia und Urheberrecht* (Multimedia and Copyright), p. 19.

cache), "Private" (no caching by a proxy cache, only a local user cache), or "No Cache" (no caching anywhere permitted). The server might also specify an "expiration date" to indicate that the information is no longer topical. Using this protocol, a user could only access information on the cache as long as it is not expired, hence actual.

Ultimately, technical solutions similar to these may enable express instructions from a copyright owner to be posted concerning the scope of permitting cache. Whether and when such solutions may come into widespread use, and whether "fair dealing" forms of caching will still be needed even with the use of such mechanisms, remains to be seen. In the meantime, caching presents an important area of legal uncertainty on the Internet.

#### **4.3.2 Web Linking**

A Web page author can create links, which point to documents on any other site, whether or not he has any connection with it. In this context it has to be asked if the proprietor of a site has any right to control who links to his site. Every Web site owner is confronted with the problem of supervision regarding representation, distribution and further use of their content. An authorised or unauthorised person is able to create his own Web site by setting up links to other Web sites, without inserting own material. Significant in this proceeding is, that the person who sets up the link on his Web site does not create a copy of the linked-to Web site on his own computer. When a user clicks on a link with a mouse, the linked-to material is automatically retrieved by the browser's software, which then copies and displays the material on the user's computer screen.<sup>456</sup>

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<sup>455</sup> Bechtold, *Multimedia und Urheberrecht* (Multimedia and Copyright), p. 19.

<sup>456</sup> Bond, *Linking and Framing on the Internet: Liability under Trademark and Copyright Law*, p. 192.

The primary set of legal principles that lawyers and commentators have identified as being applicable to the practice of linking is as follows: copyright infringement, trademark infringement, unfair competition, trademark dilution and commercial misappropriation.<sup>457</sup> Four celebrated linking disputes, one in Great Britain and three in the United States, gained interest in the cyberworld because of their potential impact on the main feature of the Web, the possibility of linking documents. Thus far, only one case was decided in Scotland,<sup>458</sup> the other lawsuits were either settled or they are still pending.

#### **4.3.2.1 Hyperlinks**

Each Web page is created using a computer language called Hypertext Markup Language (HTML) and the HTML instructs the Web browser the proper way to present a document to the viewer.<sup>459</sup> The HTML used on Web pages also contains codes that act as "link tags" to point to other Web addresses.<sup>460</sup> Instead of typing in the sometimes long and complicated address of another Web site, only by clicking on the "link tag" the user can jump instantaneously from one Web page to another on the same Web site (so-called local link) or to a Web site on a different computer somewhere in the world (so-called remote link).<sup>461</sup> It is primarily the remote link, which raises intellectual property questions.

Remote links are generally distinguished in "out links", "deep links" or "inline links". The link, which is referred to as an "out link", targets to the homepage

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<sup>457</sup> Hayes, *Advanced Copyright Issues on the Internet*, p. 87; Bond, *Linking and Framing on the Internet: Liability under Trademark and Copyright Law*, p. 193.

<sup>458</sup> *Shetland Times Ltd. v Dr. Jonathan Wills and Zetnews Ltd.*, at <http://www.carltons-dunde.co.uk/features/shetland.htm> (last visited April 1999).

<sup>459</sup> Web browsers are applications to interpret the HTML instructions in a marked-up document. When ordered to display a certain Web site, the browser sequentially steps through the document's text and, when he finds an HTML instruction, translates it. Finally, he executes these instructions and displays the content of the document on the user's screen.

<sup>460</sup> Smith, *Internet Law and Regulation*, p. 5; Nieves, *Hyperlinks, frames and meta-tags*, p. 2; Rose, *Unlawful Linking and Framing*, p. 2; Effross, *Rights, Rules and Remedies for Unwelcomed Web-Linking*, p. 3.

<sup>461</sup> Bond, *Linking and Framing on the Internet: Liability under Trademark and Copyright Law*, p. 194.

of another Web site. On the other hand, a "deep link" bypasses the homepage and targets directly to one of the "deeper" interconnected Web pages. The "inline link" is a pointer to a document, image, audio clip or the like somewhere on the Web contained in another's Web page which, in effect, pulls in the image, text or audio clip from the other Web page into the current document the user's looking at. The most common links of the associational tools currently available are HREF links, inline links and frames. These are also the links, which raise most of the legal questions with regard to copyright law.

#### (a) Hypertext Reference Link

The hypertext reference link (HREF link) is an out link and the common form of linking.<sup>462</sup> The hypertext reference link can instruct the Web Browser to transport the user to some other point within the same Web site or to a point on a different Web site. There are four possible locations a user can go to when using a HREF link: (1) to a different location on the same Web page; (2) to a different page within the same Web site; (3) to the home page of a different Web site ("surface links"); or, (4) to an internal page of a different Web site ("deep links").

The HTML code used to create the basic HREF link is itself comprised of two parts. The first part is not visible onscreen and provides a browsing computer with the Internet location, or URL, of the document to which the hyperlink is made. The other component of the hyperlink is the actual hypertext visible to users onscreen and it often appears underlined, in a different colour, or as an image.<sup>463</sup> By clicking on a hyperlink, the contents of another Web page referenced by the hyperlink are then displayed by the Web browser on the user's screen and the URL in the browser's display changes into the new address.<sup>464</sup> In fact, the user leaves the linking document entirely and enters

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<sup>462</sup> Raysman/Brown, *Dangerous Liaisons: The Legal Risks of Linking Web sites*, p. 1.

<sup>463</sup> Raysman/Brown, *Dangerous Liaisons: The Legal Risks of Linking Web sites*, p. 2.

<sup>464</sup> Smith, *Internet Law and Regulation*, p. 25; Beal, *The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solutions*, p. 711.

the new, linked-to, document. A link to the homepage of another site will be easily identifiable by the viewer, as all home pages identify their topic and source. However, links to deeper pages within a site (deep links) may be more difficult to detect because the internal page may not indicate the origin or ownership of the site. In either case, the user will be aware that the link is taking place, but in the latter she may be unaware that the computer is linking to a site owned by another author. Instead she may assume that the new page is simply an internal page of the site she was originally viewing.

Hypertext links allow the viewing of content from only one page at a time.<sup>465</sup> Virtually, it is possible to incorporate links to any other Web page on the Internet, unless the owner of the page provides technical means to prevent this. The setting up of the link does not cause any copy of the linked-to page until the link is clicked.<sup>466</sup>

#### (b) Inline Links

The second type of a link is the so-called inline link (also known as "inline graphic" or "IMG link", which stands for "IMaGe link").<sup>467</sup> The inline link does not transport the user, but rather instructs the Web Browser to bring the linked-to image or text to the user from any one of the four locations referred to above. These are slightly more complex than the straightforward HREF link. The inline links also allow the user to view only one site at a time, but with incorporated images that originate from a different location.<sup>468</sup>

Inline links are used on Web sites which provides, for example, documents, images or audio clips which are not created by the Web site owner itself. These documents, images or audio clips are inserted out of a third party Web

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<sup>465</sup> Raysman/Brown, *Dangerous Liaisons: The Legal Risks of Linking Web sites*, p. 2.

<sup>466</sup> Smith, *Internet Law and Regulation*, p. 25.

<sup>467</sup> Rose, *Unlawful Linking and Framing*, p. 2.

<sup>468</sup> Bond, *Linking and Framing on the Internet: Liability under Trademark and Copyright Law*, p. 194.

site by use of the inline link.<sup>469</sup> Instead of downloading the material to his own computer for the purpose of posting it on his site, the site owner simply provides the location of the required material in the coding. The image or graphic is then visible onscreen as a part of the Web site, but it originates at a different source than the Web site's HTML code.<sup>470</sup> Unlike a hyperlink, which has to be activated, the inline link is automatically activated when a user accesses the Web page. It is much the same way as photographs appearing in newspapers or magazine articles.<sup>471</sup> However, the viewer cannot distinguish that the image has originated at and been imported from a separate site.<sup>472</sup> When the inlining Web page is loaded the browser only displays the Internet address of the first accessed site and not of the linked-to site from where the material originates. Hence, the user is unaware that parts of the material of the accessed Web site may originate from a completely different source.

### (c) Frames

Frame technology is more complicated than that of hypertext linking. It was developed by Netscape and introduced in January of 1996.<sup>473</sup> Since then, a Web page can be divided into multiple regions and windows that may operate independently of each other but appear on the user's screen at the same time (so-called frames).<sup>474</sup> In each of these "frames" material can be displayed from other Web sites by the use of inline links while the user will still remain at the original Web site.<sup>475</sup> Thus, the practice of framing allows an original site to incorporate entire pages of other sites into its screen while still retaining the

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<sup>469</sup> Smith, *Internet Law and Regulation*, p. 26.

<sup>470</sup> Raysman/Brown, *Dangerous Liaisons: The Legal Risks of Linking Web sites*, p. 2.

<sup>471</sup> Raysman/Brown, *Dangerous Liaisons: The Legal Risks of Linking Web sites*, p. 2.

<sup>472</sup> Beal, *The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solutions*, p. 715.

<sup>473</sup> In the meantime also available in the Microsoft Internet Explorer; see Raysman/Brown, *Dangerous Liaisons: The Legal Risks of Linking Web sites*, p. 2.

<sup>474</sup> Internet access, Aug/Sep 1998, Issue 8, p. 6; O'Rourke, *Legal Issues on the Internet: Hyperlinking and Framing*, p. 3; Jakab, *Facts and Law of Web Linking*, p. 5; Beal, *The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solutions*, p. 717; Bond, *Linking and Framing on the Internet: Liability under Trademark and Copyright Law*, p. 195.

<sup>475</sup> Rose, *Unlawful Linking and Framing*, p. 5; Smith, *Internet Law and Regulation*, p. 6; Beal, *The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solutions*,

advertising and logo of the original site as well as retaining control of the viewer. Usually, the URL displayed in the frame is that of the framing site, not of the site being framed.<sup>476</sup> As a result, the origin of content within any frame is not clear to the viewer. Users may mistake the framed site as part of the original site, because the content of each frame will be loaded automatically by the end-user's browser after accessing the Web site. Therefore framing causes confusion as to the ownership of a site.

#### **4.3.2.2 Linking Disputes**

The use of these various types of links has raised some legal disputes. A brief survey of the facts of some celebrated disputes and the findings of the courts, as far as such decisions have been reached, shall help to illustrate the legal implications of linking.

##### **(a) Shetland Times v Shetland News**

The first and only court decision at present to address a linking issue was rendered by the Court of Session in Edinburgh, Scotland.<sup>477</sup> The plaintiff in this case owns and publishes *The Shetland Times* newspaper. Versions of the paper appear both in print and on a Web site operated by the plaintiff. The defenders own and operate a Web site on which they publish a news reporting service entitled *The Shetland News*. On their Web site the defenders reproduced verbatim a number of headlines appearing in *The Shetland Times*. These headlines were deep linked to the plaintiff's Web site. Users viewing the Shetland News Web site could then view the text of an entire

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p. 717.

<sup>476</sup> Raysman/Brown, *Dangerous Liaisons: The Legal Risks of Linking Web sites*, p. 2.

<sup>477</sup> *Shetland Times Ltd. v Dr. Jonathan Wills and Zetnews Ltd.*, at <http://www.carltons-dunde.co.uk/features/shetland.htm> (last visited April 1999). Further information at <http://www.shetland-news.co.uk/headline/97nov/settled/settled.html> and at <http://www.shetland-news.co.uk/opinion.html> (last visited April 1999).

Shetland Times article simply by clicking on the headline.<sup>478</sup> Users, thinking they were viewing articles posted by the Shetland News, had actually unknowingly jumped to an internal Web page within the Shetland Times Web site, bypassing customer service information and advertising. Shetland News set up these links in a way that users had no choice to stay on the plaintiff's Web site but had to return with the browser's "back" button to the Shetland News site after reading the article issued by the Shetland Times.

The plaintiffs claimed that this activity constitutes copyright infringement on two grounds. First, they maintained that the headlines made available on their Web site are cable programs within the meaning of section 7(1) of the U.K. Copyright, Designs and Patents Act 1988 (CDPA). The facility made available by the defendants on their Web site was alleged to be a cable programme service within the meaning of section 7(1) of the CDPA and the inclusion of those items in that service constitutes an infringement of copyright under section 20 of the CDPA. Furthermore, the plaintiffs maintained that the headlines are literary works owned by them and that the defendant's activities constitute infringement by copying them under section 17 of the CDPA.

The defence argued that they never made or kept copies of the plaintiff's on-line edition and therefore did not infringe copyright.<sup>479</sup> The only action taken by the defendants was directing their readers to the plaintiff's on-line edition. In detail, they claimed that the facility made available by them is not a cable programme service since it does not include "sending" of the information as required by the legal definition in section 7(1) of the CDPA. Provided that the court would find that the information is "sent" within the meaning of the Act, they argued that the sending is done only by the defendants and not by the plaintiffs. Finally they maintained that in any case the service was an "interactive service" excepted by section 7(2)(a) of the CDPA. The court followed both arguments raised by the plaintiffs and issued an interim interdict

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<sup>478</sup> A live demonstration of how the linking was performed and how it looked is available at Simulation of Shetland News Pages, at <http://www.shetland-times.co.uk/st/newsdemo/> (visited Feb. 1999).

<sup>479</sup> By creating a link to another Web site, the linking site is simply directing users to the linked-to site and does not involve copying this site. Not until a user clicks on the link the user's computer receives the data containing the information directly from the memory of the linked-to site's host computer.

restraining the defenders to establish deep links to the Web pages of the plaintiff. Because of its uniqueness in the "cyberworld", comments have been issued not only in the United Kingdom. Some claimed that this decision might be able to destroy the nature of the Internet and that the prevention of links would deprive it of its character.<sup>480</sup>

On 11th November 1997 the Shetland Times and the Shetland News settled the dispute, agreeing that *The Shetland News* could continue to use the headlines of *The Shetland Times*, provided that (1) an acknowledgement is given for each headline as being "A Shetland Times Story", (2) the Shetland Times logo appears next to any link leading to a Times article and (3) any link to the Times site had to connect only to the Times Home page and not to a location deep within the site.<sup>481</sup>

(b) TicketMaster v Microsoft

Another linking dispute involving "deep links" arose between TicketMaster, a familiar distributor of tickets to recreational, sporting and cultural events in the United States, and software giant Microsoft.<sup>482</sup> TicketMaster is the proprietor of a Web site that allows users to learn information about events and their ticket availability as well as to order tickets directly over the Internet.<sup>483</sup> Microsoft runs a Web site called "Seattle Sidewalk" that features information about Seattle, including information concerning upcoming entertainment events. As part of its service Microsoft provided links from its Seattle Sidewalk site pages directly to the respective pages of TicketMaster's site that facilitates purchase from TicketMaster of tickets to the respective events included among Seattle Sidewalk's listings. Ticketmaster objected to these

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<sup>480</sup> See MacQueen, *Copyright and the Internet*, p. 77.

<sup>481</sup> Publisher's Statement: Internet Dispute Settled, at <http://www.shetland-times.co.uk/st/daily/dispute.htm>.

<sup>482</sup> *Ticketmaster Corp v Microsoft Corp*, No. 97-3055 DDP (C.D. Cal. filed Apr. 28, 1997), available at <http://www.jmls.edu/cyber/cases/ticket1.html> (visited May 1999). Ticketmaster filed a Second Amended Complaint, which asserts claims for copyright and trademark infringement, *Ticketmaster Corp v Microsoft Corp*, No. 97-30555 RAP (C.D. Cal. filed Feb. 12, 1998).

<sup>483</sup> Ticketmaster's home page is located at Ticketmaster Online, at <http://www.ticketmaster.com>

links, especially because Microsoft originally sought Ticketmaster's permission to link to its site for a fee. When negotiations broke down, Microsoft installed the link anyway, without paying Ticketmaster at all.<sup>484</sup> For example, a user browsing Seattle Sidewalk could come upon information about an upcoming rock concert at a Seattle venue and be presented not only with the information but with a deep link directly to TicketMaster's internal sale Web page for that event.<sup>485</sup> The user could click on that link, be transported directly to TicketMaster's sales page, purchase tickets from TicketMaster and return to Seattle Sidewalk with a click of his browser's "back" button. In this way, the user employs the TicketMaster service without entering and navigating its site from its homepage. TicketMaster asserted claims of copyright infringement, based on the allegations that (i) in creating links to the TicketMaster site, Microsoft repeatedly viewed and thus copied onto its own computers the copyrighted contents of TicketMaster's Web site, and (ii) in the operation of the links, Microsoft was reproducing, publicly distributing and displaying without permission TicketMaster's copyrighted Web site material.<sup>486</sup> In Microsoft's answer to TicketMaster's complaint,<sup>487</sup> Microsoft asserted numerous defences, including that TicketMaster, when it chose to set up its Web pages, assumed the risk that others would use its name and URLs,<sup>488</sup> that TicketMaster knew that owners of other Web pages would create such links,<sup>489</sup> and that Microsoft's presentation of information about TicketMaster on its Seattle Sidewalk site is commercial speech protected by the First Amendment.<sup>490</sup> Although Microsoft removed some or all of its links to the

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(visited Feb. 1999).

<sup>484</sup> Beal, *The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solutions*, p. 714.

<sup>485</sup> Beal, *The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solutions*, p. 714

<sup>486</sup> *Ticketmaster Corp. v Microsoft Corp.*, p. 26, No. 97-30555 RAP (C.D. Cal. filed Feb. 12, 1998)

<sup>487</sup> Microsoft's Answer to First Amended Complaint, Affirmative Defences and Counterclaims, *Ticketmaster Corp. v Microsoft Corp.*, No. 97-3055 DDP (C.D. Cal. answer filed May 28, 1997). A copy of this answer is available at <http://www.ljx.com/LJXfiles/ticketmaster/answer.html> (visited May 1999).

<sup>488</sup> Microsoft's Answer to First Amended Complaint, Affirmative Defences and Counterclaims, *Ticketmaster Corp. v Microsoft Corp.*, p. 53, No. 97-3055 DDP (C.D. Cal. answer filed May 28, 1997).

<sup>489</sup> Microsoft's Answer to First Amended Complaint, Affirmative Defences and Counterclaims, *Ticketmaster Corp. v Microsoft Corp.*, pp. 41, 43, 52, No. 97-3055 DDP (C.D. Cal. answer filed May 28, 1997).

<sup>490</sup> Microsoft's Answer to First Amended Complaint, Affirmative Defences and Counterclaims,

TicketMaster site after the complaint was filed in April 28, 1997 in the U.S. District Court for the Central District of California, the lawsuit remains unresolved.

#### **4.3.2.3 Legal Aspects of Hyperlinking**

Out links and inline links raise a number of potential copyright issues. Because the problems related to Web linking are relatively new, there are no particular South African laws or precedents to rely upon. At certain stages of the legal examination it is therefore necessary to compare the legal evolution in foreign countries that have already dealt with some linking issues.

An out link that points to a site containing infringing material may, for example, cause further infringing reproductions, public performances, distributions and/or importation to occur when the user reaches that site and the infringing material is stored in the RAM or downloaded on hard disk. Even if material on the destination site is not infringing of its own right, the reproduction that occur as a result of the out link may not be authorised, since the out link may have been established without the explicit permission of the owner of material on the destination site. The latter situation will be generally the case, however, in most of the cases legally because of the fair dealing clause or an implied licence. Furthermore it has to be answered, if a person who offers a Web site has the right to prohibit third parties from creating hyperlinks pointing to his site.

##### **(a) Exceptions of Infringement**

Before the examination of whether a linking party infringes on copyright, some special defences always mentioned in the context of Web linking will be first introduced. During the course of usual Web browsing it is almost certainly the case that the copyright of authors will be infringed. One of the most important examples in this context is the copy loaded into the RAM of the user's

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*Ticketmaster Corp. v Microsoft Corp.*, p. 74, No. 97-3055 DDP (C.D. Cal. answer filed May 28,

computer to make a document visible onscreen. As discussed above, this copy constitutes an infringing reproduction for copyright purposes, however, it usually falls within the fair dealing exception. The liability of the linking party depends strongly on that of the end-user. The end-user is, however, in most of the cases excused by certain exemptions provided for in the Act. Whether these exceptions apply to the linking party will be the subject of the examination below.

#### (a)(i) Fair Dealing

The most important fair dealing provision in the context of Web linking provides that copyright shall not be infringed when the use of the work is made for "purposes of research or private study by, or the personal or private use of, the person using the work."<sup>491</sup> This will apply to many users browsing privately through the Web.<sup>492</sup> With regard to the linker, it is more likely that he establishes a link for commercial purposes,<sup>493</sup> however, there are many private linkers only providing links for similar personal interests.

In context with inline links, which insert only parts of a Web site into another Web site, the fair dealing provision is applicable if the target material is a literary, musical or artistic work.<sup>494</sup> In general, it seems that the intention of the Act is not to permit the person relying on the exclusion to deprive the owner of copyright of fair remuneration but to provide a fair and equitable way of allowing others to refer to copyright works.<sup>495</sup> To the extent that Web pages are computer programs, however, there is no similar provision with regard to computer programs.<sup>496</sup> This is a result of the assumption that so-called "home

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<sup>491</sup> Sections 12(1)(a) and 15(4) of the Act.

<sup>492</sup> Bond, *Linking and Framing on the Internet: Liability under Trademark and Copyright Law*, p. 227.

<sup>493</sup> Beal, *The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solutions*, p. 730.

<sup>494</sup> See sections 12(1)(a) and 15(4) of the Act.

<sup>495</sup> Smith, *Copyright Companion*, p. 52.

<sup>496</sup> See section 19B(1) of the Act according to which only the fair dealing provisions under section 12(1)(b) and (c) of the Act shall *mutatis mutandi* apply.

copying" of computer programs is not permitted.<sup>497</sup> The only private use of a computer program that is allowed under certain circumstances is mentioned in section 19B(2) of the Act. According to this the copyright in a computer program is not infringed by a person who is in lawful possession of a computer program or an authorised copy thereof if he makes copies to the extent reasonably necessary for back-up purposes, provided such a copy is intended exclusively for personal or private purposes and is destroyed when the possession of the computer program in question, or the authorised copy, ceases to be lawful.<sup>498</sup> In essence this exception allows a licenced user of a computer program to make and retain back-up copies of that program for as long as he remains a licenced user.<sup>499</sup> To the extent that Web sites are computer programs, the fair dealing provision concerning private use is therefore not applicable to the use of Web sites. The defence that will gain even more importance with regard to Web linking will therefore be the one of an implied licence.

#### (a)(ii) Implied Licence

It is stated that the implied licence defence may apply, because linking is so fundamental to the functioning of the Web, that it could easily be considered incidental to viewing.<sup>500</sup> Besides, Web site providers usually do not mind having their sites linked-to since this means an increased use of their site, as long as the link does not bypass advertising used as a revenue generator.<sup>501</sup> Regarding for example the *Washington Post v TotalNews* case,<sup>502</sup> the plaintiffs in that linking dispute are rather concerned about their advertising revenue. Economical exploitation in the era of the Internet is not the same as

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<sup>497</sup> Dean, *Handbook of the South African Copyright Law*, p. 1-53.

<sup>498</sup> Section 19B(2) of the Act.

<sup>499</sup> Dean, *Handbook of the South African Copyright Law*, p. 1-60.

<sup>500</sup> Beal, *The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solutions*, p. 730.

<sup>501</sup> Raysman/Brown, *Dangerous Liaisons: The Legal Risks of Linking Web sites*, p. 3; Beal, *The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solutions*, p. 710.

<sup>502</sup> *Washington Post Co. v Total News Inc.*, Law Journal Extra!, <http://www.ljx.com/internet/complain.html> (last visited March 1999).

it used to be in times of printed press. Revenues on and around the Internet are primarily gained by advertisements, as long as Web site providers have not established access controls for their sites and demand remuneration.<sup>503</sup> Homepages of Web sites that are often visited, or "hit", are considered prime real estate and are relatively costly sites at which to advertise.<sup>504</sup> Therefore the owner of the site generally does not want to prohibit others from setting up out links to his Web site; rather he agrees to the set up of such out links since this means an increased use of his site. Based on this competitive and free culture, the prevalent attitude on the Web thus far has generally been that no permission is necessary to link to another site.<sup>505</sup>

If the Web site owner does not agree with this "free spirit" of the Internet, it must be assumed, that he otherwise would provide means to select the number of visitors to his page, for instance by demanding an access fee or implement "Web-wrap" agreements, which force the viewer to view screens containing various legal terms and to agree to such terms by clicking the mouse or typing "I agree" before proceeding further into the site.<sup>506</sup> Thus, as long as the link does not infringe any further interests of the author, he cannot prohibit such a hyperlink. However, when the homepages are circumvented by the linking party, as happened in the cases concerning "deep links", such links bypass the advertisements of the sponsor Web site and the value inherent to that Web site to advertisers is therefore reduced.<sup>507</sup> An implied licence with respect to a deep link seems therefore to be questionable. Furthermore the Web site owner can have a justified interest to prohibit certain links pointing at the Web site which contains his work, for example, if the link is set up on a Web site of a provider, which contents would prejudice

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<sup>503</sup> In 1996 businesses spent more than US\$ 150 million on Web advertising; see Rose, *Unlawful Linking and Framing*, p. 8. By 2001 an estimated eleven percent of global ad revenues (or US\$ 59 billion) will be Web advertising; see Sebastian Rupley, *Web Ads Hit Their Stride*, at <http://www.zdnet.com/products/content/articles/199803/ads.stride/index.html> (visited Jan. 1999).

<sup>504</sup> Smith, *Internet Law and Regulation*, p. 32; Beal, *The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solutions*, p. 710.

<sup>505</sup> Beal, *The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solutions*, p. 710; see also Tim Berners-Lee, *Links and Law: Myths*, p. 5, at <http://www.w3.org/DesignIssues/LinkMyths.html> (visited May 1999).

<sup>506</sup> Effross, *Rights, Rules and Remedies for Unwelcomed Web-Linking*, p. 675.

<sup>507</sup> Effross, *Rights, Rules and Remedies for Unwelcomed Web-Linking*, p. 675.

his lawful intellectual or personal interests in the work.<sup>508</sup> If the persons who set up a hyperlink could be compared to the blameless operators of photocopying machines, the owner of a linking site can be characterised as merely directing people to information that other people had made available for photocopying by any interested person. This argument rests on the premise that the owner of a Web site grants the entire world an implied licence to link to it. If successful, this argument would appear to clear linkers from any liability for infringement of the target site owners copyrights to reproduce and to perform the material on the target site.

(a)(iii) Quotation

A further exception from protection is provided regarding quotations of literary works or musical works, which are lawfully available to the public.<sup>509</sup> Generally a quotation is used in the scope of another work provided that the quotation is compatible with fair practice,<sup>510</sup> and the extent thereof does not exceed the extent justified by the purpose.<sup>511</sup> However, as described above, out links are only references to the content of another site. The use of an out link does not give further insight to the material of the linked-to site, rather it has to be categorised as a "footnote", for example appearing in academic works. Differently from out links is the use of an inline link. An inline link is not merely a reference. If an inline link is once set up on a Web site, the content of the linked-to site will always be loaded into the RAM of the visitor of the linked site and appear onscreen. This is problematic within the use of frames where the material of the linked-to site appears on the linked site without mentioning the source. This was the case, for example, in *Shetland Times v Shetland News*,<sup>512</sup> where users could read Times articles framed on the News site

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<sup>508</sup> Smith, *Copyright Companion*, p. 25.

<sup>509</sup> Section 12(3) of the Act.

<sup>510</sup> It is submitted that the concept of an act being "compatible with fair practice" is the same as the concept of a "fair dealing" with a work; see Dean, *Handbook of South African Copyright Law*, p. 1-53.

<sup>511</sup> Section 12(3) of the Act.

<sup>512</sup> *Shetland Times Ltd. v Dr. Jonathan Wills and Zetnews Ltd.*, at <http://www.carltons-dunde.co.uk/features/shetland.htm> (last visited April 1999). Further information at

without knowing their origin. This is also problematic within the use of deep links that are bypassing the homepage of the linked-to site. Confusion amongst the source of the material can also occur with the use of deep links that are bypassing the homepage of the linked-to site, when the internal site of the linked-to site does not provide any information about the ownership and the URL does not change on the linked site. Thus, the use of inline links, as far as the source of the linked-to site is not mentioned, does not fulfil the requirements of a quotation in section 12(3) of the Act.

#### *(a)(iv)* Reproduction of an Address in the Press

If a link can be categorised as an address in the meaning of the Act, the setting up of a link on a Web site for purposes of the press would not infringe the copyright of the copyright owner because of section 12(6)(a) of the Act. Section 12(6)(a) of the Act reads as follows: "The copyright in a ..., address ... which is delivered in public shall not be infringed by reproducing it in the press or by broadcasting it, if such reproduction or broadcast is for an informatory purpose." Because the processes on the Internet are not comparable to broadcasting or transmissions in a diffusion service,<sup>513</sup> this section is only applicable regarding the reproduction of a link in the press.

#### *(b)* Infringing Linking

Because of the value to Web sites of being visited frequently, linking, often done without the knowledge or consent of the linked-to site, has largely been an unquestioned practice, and has even been considered an advantage to the linked-to site. However, the increased use of the Internet by commercial organisations has heightened legal anxiety about links. Different types of links can raise different liability issues, which will be discussed in the following.

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<http://www.shetland-news.co.uk/headline/97nov/settled/settled.html> and at <http://www.shetland-news.co.uk/opinion.html> (last visited April 1999).

<sup>513</sup> Section 12(10) of the Act states that section 12(6) shall also apply with reference to a work

### (b)(i) Hyperlinks in General

The first links to be examined for the purposes of copyright infringement will be hyperlinks in general. Although there are, at least not so far, no legal disputes evolved concerning usual hyperlinks, linking in general imposes some problems which have to be discussed on a general basis before examining particular problems of specific kinds of links.

#### (b)(i)(1) Infringement of Reproduction Right

Linking may infringe the Web site author's exclusive right to reproduce his work. A reproduction can be assumed when the work is copied, whereas it is not necessary for the reproduction to be in a tangible form, nor does it have to be in exactly the same form as the original.<sup>514</sup> The main problem with Web linking in a copyright context is the fact that the underlying technology of the Internet does not require the linking party to "copy" the linked-to site in the traditional way.<sup>515</sup> The act of creating a hypertext link requires only the reproduction of the URL of the site, not any content of the site. As examined above, the URL itself lacks unique or characteristic elements, and is therefore not protected by copyright. Technically, no copying of copyrighted work is involved in the creation or uses of a link itself. The linking party only incorporates the HTML command into its file. Inserting in one's page a link to another site can be considered no different than listing a phone number or address for the user to call or visit. When the user activates the link his browser's software retrieves the corresponding document and displays it on his screen. There is, however, no copy or whatsoever passing the linking party's server. Defendants in linking disputes therefore always maintain that the only role they are playing is to provide means to guide users to the linked-to sites. However, it is argued, that the link is not comparable to the display of a phone number, but rather is a device that delivers the linked page to the

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transmitted in a diffusion service.

<sup>514</sup> Smith, *Copyright Companion*, p. 49.

<sup>515</sup> Bond, *Linking and Framing on the Internet, Liability under Trademark and Copyright Law*,

viewer, and thereby infringes on protected rights of the copyright holder.<sup>516</sup> In any case, there are some copies involved in the linking process that may be relevant for copyright purposes.

*(b)(i)(1)(a)* RAM copy

As explained above, one copy that is created during the process of Web browsing is the one that is stored into the RAM of the user's computer when he retrieves the linked-to document.<sup>517</sup> The question is, whether the linking party can be accused of helping the user to create this copy. Section 23(1) of the Act provides that copyright is infringed by any person who "does or causes any other person to do" a restricted act without the authority of the copyright owner. This provision makes clear that copyright is infringed when an infringing act is committed not only by the actual perpetrator of that act but also by someone who instigates or instructs the doing of that act.<sup>518</sup> The instigator of the infringing act commits contributory copyright infringement.<sup>519</sup> However, as discussed above,<sup>520</sup> it has to be assumed that the author of the Web site granted an implied licence to the user to browse and create the copy stored in his RAM. In most of the cases, the user can thus not be held liable for copyright infringement. Therefore it is to establish whether the linking party can be accused of copyright infringement although the user has a licence to copy the Web sites. An interpretation of the text of section 23(1) of the Act leads to the conclusion that, at least in the present cases, this is not the case. According to this provision infringement only occurs when somebody interferes with the "exclusive rights" of the copyright owner. In case the user has an implied licence to load the Web documents into his computer's RAM, the copyright owner does not have an "exclusive right" any more. He rather

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p. 223.

<sup>516</sup> See Brad Templeton, *Linking Rights*, p. 11, at <http://www.clari.net/brad/linkright.html> (visited Jan. 1999).

<sup>517</sup> Beal, *The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solutions*, p. 710.

<sup>518</sup> Dean, *Handbook of South African Copyright Law*, p. 1-50.

<sup>519</sup> Dean, *Handbook of South African Copyright Law*, p. 1-50.

<sup>520</sup> See chapter 4.2.1.8.

shares his right with the user. The linking party therefore cannot "cause" the user to do any act that the owner has the exclusive rights to do. Thus, the person who set up the link can not be accused of contributory infringement.

Assumed the case that the user is doing a "restricted act", the infringement of an instigator has to be seen under an adequate causation between cause and effect. The circumstance, that the copyright infringement is committed independently of a third party, is not sufficient to reject an adequate causation. A hyperlink is comparable with a footnote or a cross reference in a book or essay. However, a hyperlink differs from a traditional footnote or a cross-reference in an important point: If the user activates the hyperlink, the browsing computer establishes a new connection with the new linked site and a copy of this site will be loaded immediately into the RAM of the user's computer, hence a reproduction took place.<sup>521</sup> Only after the copy was loaded, the user can check whether the work is copyright protected and whether he committed a copyright infringement. The user on the Internet has therefore no possibility to prevent a copyright infringement. It therefore appears justified, to assign the obligation to check from time to time the content to the person who set up the hyperlink. This person must be aware of the content of the linked-to Web site, otherwise he would not have set up the hyperlink. Without setting up the hyperlink, the user would certainly not be able to activate the hyperlink and to infringe someone's copyright. Thus, the set up of a hyperlink can be seen as a cause for a person to do an act, which infringes an exclusive right of a copyright owner, hence, he commits contributory copyright infringement.<sup>522</sup> However, this should only apply, if the providing of hyperlinks was the result of a personal selection and not a mere technical selection, such as the result of a search engine.

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<sup>521</sup> Raysman/Brown, *Dangerous Liaisons: The Legal Risks of Linking Web sites*, p. 2.

*(b)(i)(1)(b)* Titles or Short Phrases

The same question arises in cases where the linking party uses titles or short phrases as hyperlinks. This happened in the *Shetland Times* case<sup>523</sup> where the defendants displayed the headlines of the plaintiff's paper. Lord Hamilton held that there was copyright in the headline texts, so that the actions of the *Shetland News* in copying them for reproduction on its own Web site were an infringement. With regard to the definition of literary works mentioned above, headlines usually are protected as literary works because the author invests a certain amount of skill and effort to embrace the article and gain the interest of the reader.<sup>524</sup> If this is true for other titles or short phrases will depend on the circumstances of the particular case.<sup>525</sup>

*(b)(i)(2)* Infringement of Publication Right

It may be argued that the linked-to Web site is published when the link is established, or, alternatively, when the user activates the link, and that linking therefore infringes the exclusive right of the author to publish his site. The act of creating a link does not implicate the content of a particular site, but merely directs the user toward a particular location. Inserting in one's page a link to another site can be considered no different than listing a phone number or address for the user to call or visit. However, a competing view is that the link represents more than a group of words, but rather a mechanism used to convey or deliver an entire site.

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<sup>522</sup> Dean, *Handbook of the South African Copyright Law*, p. 1-27.

<sup>523</sup> *Shetland Times Ltd v Dr Jonathan Wills and Zetnews Ltd*, at <http://www.carltons-dunde.co.uk/features/shetland.htm> (last visited April 1999). Further information at <http://www.shetland-news.co.uk/headline/97nov/settled/settled.html> and at <http://www.shetland-news.co.uk/opinion.html> (last visited April 1999).

<sup>524</sup> See also MacQueen, *Law & the Internet*, p. 74.

<sup>525</sup> In the United States, commentators state that in most instances titles and short phrases are not copyrightable, see Hayes, *Advanced Copyright Issues on the Internet*, p. 89.

Under the Act, "publication" takes place when copies of the work are issued to the public.<sup>526</sup> The number of copies that have been issued is irrelevant.<sup>527</sup> To the extent that Web pages are computer programs, it has to be stressed, however, that publication of a computer program will only constitute infringement if it was previously unpublished.<sup>528</sup> If linking is considered to be a publication of a Web site this must be founded on the idea that the linking party provides access to the site as it is displayed on the user's screen. First, it is questionable whether this constitutes issuing "copies" of the site to the public. Considering the technical facts, the linking site merely provides access to the material the author has previously posted on the Web. This is usually no copy but rather the original program. What is made available to the public by establishing a link is therefore not a copy in the traditional sense but rather the possibility to create own copies. If this is nevertheless considered to be a "publication" of a Web site then it has to be argued that the author of the material who posted it on the Web previously published the site. The linking party does therefore not infringe on the right to publish a work.

#### *(b)(i)(3)* Infringement of Public Performance Right

Furthermore one may consider the linking party to infringe the exclusive right of the author to perform his work in public. A "performance" includes any mode of visual or acoustic presentation of a work, including any such presentation by the operation of a loudspeaker, a radio, television or diffusion receiver or by the use of a record or by any other means.<sup>529</sup> As discussed above, the display of a Web site on the Internet may therefore indeed be considered a public performance. However, similar to the publication above, a technical evaluation leads to the conclusion that it is not the linking party that performs the site but rather the author of the Web site himself. This is comparable with an answering machine system. One can program a number

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<sup>526</sup> Section 1(5)(e) of the Act.

<sup>527</sup> Smith, *Copyright Companion*, p. 83.

<sup>528</sup> Smith, *Copyright Companion*, p. 83.

<sup>529</sup> Section 1(1) sv "performance" of the Act.

into speed dial and then call the number to reach a company's answering machine and listen to the outgoing message. The server of the linked-to site is like an answering machine. When the author of the linked-to site places his work on the server, it is akin to placing an outgoing message on the answering machine. The Uniform Resource Locator (URL) that designates the location of the linked-to site is the "phone number" used to reach the answering machine. When the linking party creates the link this is comparable to putting a phone number on the speed dial memory. When the user activates the link, the user's Web browser "calls" the linked-to site's server. The answering machine (i.e. the server) then transmits the outgoing message (i.e. the linked-to site) to the user's Web browser for the user to view. Listening to the transmission of an answering machine's outgoing message over a telephone line would not be considered a public performance. If someone lets another use his phone and dials the answering machine for him, they have therefore not violated the performance right. By the same token, the linking party is not infringing on the performance right.

#### *(b)(i)(4) Infringement of Broadcasting Right*

As discussed above, the display of a Web site does not constitute a broadcast, because according to its definition this requires the work to be transmitted to a satellite.<sup>530</sup> This is, however, not always the case in the course of Internet telecommunication. Thus, no infringement of the broadcasting right takes place during the course of Web linking.

#### *(b)(i)(5) Infringement of Transmission Right*

Whether linking infringes on the exclusive right of a Web site owner to transmit his work in a diffusion service depends on whether the Internet can be regarded as such a medium. As discussed above, a transmission on the

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<sup>530</sup> See sections 1(1) sv "broadcast" and sv "programme-carrying signal" of the Act.

Internet is not comparable to a transmission in a "diffusion service", because it also takes place over satellites. Thus, no infringement of the transmission right takes place during the course of Web linking.

#### (b)(i)(6) Infringement of Adaptation Right

The purpose of conferring the adaptation right is to allow the copyright owner to control more than simply verbatim forms of copying. The Copyright Act expressly provides examples of adaptations of certain categories of works,<sup>531</sup> but it has to be noted that this list is not exclusive but rather a specification as the term "includes" suggests.<sup>532</sup> Infringement of the adaptation right may therefore occur in any case where a derivative work is created. In the case of simple hyperlinking, however, there is no reason for the assumption the linking party might create adaptations of the linked-to Web site. As explained above, the linking party only provides access to the linked-to site but never creates an own copy of it, nor does it provide alterations.

#### (b)(ii) Deep Links

"Deep linking" does not involve copying of the linked-to site by the linking party. Thus there is no implication on the reproduction right. However, a link to a page deep within a site may create liability under unfair trade practice laws if the viewer could be confused or misled about the origins of that page. Additionally, a link to an internal page may take the user past the page on which the site's advertising is posted. In the TicketMaster case<sup>533</sup> regarding "deep links", for example, TicketMaster alleged that Microsoft has usurped the

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<sup>531</sup> Section 1(1) sv "adaptation" of the Act.

<sup>532</sup> The U.K. Copyright, Designs and Patents Act, for example, contains in section 21 of the CDPA a similar definition of an "adaptation" as the South African Copyright Act. However, instead of providing "Adaptation ... includes" the CDPA provides "Adaptation ... means". This difference in terminology has the consequence that the definition of the CDPA is exclusive whereas the South African Copyright Act leaves space for different definitions.

<sup>533</sup> *Ticketmaster Corp v Microsoft Corp*, No. 97-30555 RAP (C.D. Cal. filed Feb. 12, 1998).

navigational control of its Web site.<sup>534</sup> Because the Microsoft link bypasses TicketMasters home page by going deep into the site, customer service announcements and advertising displayed on the home page are ignored by the users. The ability to guide customers strategically through an organisation's place of business is, however, a cornerstone of effective marketing. The placement of high-margin products at the supermarket check-out line or the geographical location of merchandise in a department store is analogous to the page layout of a Web site. However, these are questions to be answered regarding liability in unfair competition and/or under the Trademark Act,<sup>535</sup> and will therefore not be discussed in this thesis.

#### (b)(iii) Inline Links

Contrary to the above mentioned kinds of links, an inline link, such as an IMG-link, do not concern Web sites as a whole but rather images and graphics contained on the sites. These graphics are generally protected as "artistic works" under section 2(1)(c) of the Act, provided they meet all further requirements. While no suits have been filed alleging that an inline link violates proprietary rights, there is record of one threatened suit. In 1996, a graduate student at Princeton established an inline link that imported the daily changing Dilbert comic strip offered on the Web site of United Media to his own Web page, he called "Dilbert Hack Page".<sup>536</sup> Visitors to the Dilbert Hack Page could then view recent Dilbert comics in a context different from that provided by United Media, after their browsers automatically contacted United Media's Dilbert site, downloaded the links identified image files and displayed the targeted image files. In July 1996, United Media contacted Daniel Wallach informing him that Dilbert comic strips were the intellectual property of United

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<sup>534</sup> *Ticketmaster Corp v Microsoft Corp*, No. 97-30555 RAP (C.D. Cal. filed Feb. 12, 1998).

<sup>535</sup> Raysman/Brown, *Dangerous Liaisons: The Legal Risks of Linking Web sites*, p. 4.

<sup>536</sup> The New York Law Journal, at <http://www.ljx.com/internet/0408lias.html> (last visited March 1999). The Dilbert Cartoon appears on United Media's site at <http://www.unitedmedia.com/comics/dilbert/> (last visited March 1999).

Media and could not be used without their express written consent. United Media saw in the behaviour of the private person an infringement of their copyright.<sup>537</sup> Of course, the student objected that technically he was not making a copy of the strip, but in face of uncertain liability he agreed to remove the link from his page in August 1996.<sup>538</sup>

*(b)(iii)(1) Liability for setting up an IMG-link*

As described above, an IMG-link, which stands for "image", is an example of an HTML code used to insert inlined images into HTML documents, such as Web sites. Inline images or graphics are visible onscreen as part of a Web site, but originate at a different source, such as another Web site or database.<sup>539</sup> If a user accesses a Web site which provides an IMG-link, the browser will then load the image or graphic of the linked-to site onto the linking Web site. Hence, previously a copy of that image or graphic did not exist on the accessed Web site. In contrast to a hyperlink that still requires a clicking on it, an IMG-link will automatically insert the image or graphic from the linked-to Web site or database. In other words, hyperlinks allows an end-user to decide if he wants to access the second Web site. This decision is taken away from the browser of the user, if he access a Web site providing an IMG-link. This is not comparable with a traditional footnote or cross-reference, rather the HTML code of the linking Web site and the images or graphics of the linked-to Web site are merged into an inseparable unit. However, the inlined image or graphic never appears on the linking party's screen nor does it pass through its server. It will only appear onscreen at the user's computer screen accessing the linking Web site. With IMG-links, a person can therefore provide different images or graphics on his Web site, without causing or storing a reproduction of the work, only by pointing to external sources. The

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<sup>537</sup> United Media threatened to sue under the copyright theory of infringement of public display or performance rights; see a copy of the United Media's Letter to David Wallach at <http://www.cs.princeton.edu/dwallach/dilbert>.

<sup>538</sup> Raysman/Brown, *Dangerous Liaisons: The Legal Risks of Linking Web sites*, p. 3.

<sup>539</sup> Beal, *The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solutions*, p. 716.

technical characteristics of linking do not require the linking party to copy the images in the traditional way.<sup>540</sup> Thus, the linking party does not actually copy the inlined image and therefore it does not directly infringe copyrights.

However, a reproduction does take place at least in the computer RAM of the user who accesses the linking Web site. It may therefore be considered that the linking party commits contributory copyright infringement by causing the user to create a reproduction of the image or graphic in his RAM. The providing of an IMG-link must therefore be of adequate causality for the copyright infringement for that reason. As discussed above, this would not be the case when the copy created by the user would be comprised by the implied licence guaranteed by the author of the linked-to site. However, it could be argued that the implied licence alleged to have been guaranteed by the author only includes usual browsing activities and that inlining images is none of these usual activities. First of all, an implied licence is a contractual agreement, although not written or formally negotiated, but inferred from conduct.<sup>541</sup> Usually, contracting parties know each other and have been involved in commercial transactions. Though it seems possible to allege the existence of a contractual agreement despite the parties not knowing each other, this implies also that the scope of this tacit agreement is to establish very carefully. With regard to the implied licences in the present cases this means that the scope of the agreements can only reach so far as it is necessary for users to do what the author intended them to do with his site when he posted them on the Web. Generally, this would include visiting the site. However, it seems to be unlikely that a Web site owners agrees to other using his images or graphics by inlining them into another site. It could therefore be concluded that an implied licence for the user to create a copy of the inlined image does not exist. However, the user may be excused by the fair dealing clause.<sup>542</sup> In most of the cases he will browse privately and thus create the RAM copy of the inlined image or graphic for personal or private

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<sup>540</sup> Beal, *The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solutions*, p. 716.

<sup>541</sup> See section 22(4) of the Act.

<sup>542</sup> Section 15(4) and 12(1) of the Act.

use. If this is the case, the question arises, whether the linking party can be accused of committing contributory copyright infringement by causing the user to copy the inlined images, although the user is excused by the fair dealing clause. This case is different to that of an implied licence because the fair dealing exception generally requires the existence of an infringement by the user and just excuses it afterwards.<sup>543</sup> One could therefore argue, that basically both parties commit infringement and it is only because of special circumstances that the fair dealing exception is applicable to the user, such as private use or for the purpose of research or private study.<sup>544</sup> It would be an unfair advantage for the linking party if it could profit by this also. Moreover, the fair dealing clause will not be applicable to every user but only to those that browse within the specific purposes that are provided by the fair dealing clause. If the linking party would constitute contributory infringement only in those cases where the fair dealing exception does not apply to the user, the liability of the linking party would completely depend on circumstances that it has no influence upon. The results would be rather incidental and would lead to different and thus unfair results. An answer would therefore be that in cases of IMG links the linking party commits contributory infringement by causing the user to copy the inlined images. Whether the user, too, can be held liable for copyright infringement or whether he is excused by the fair dealing exception, is irrelevant concerning the liability of the linking party. This solution would be compatible with section 23(1) of the Act, whereas a contributory infringement occurs if any person "causes any other person to do, in the Republic, any act which the owner has the exclusive rights to do or to authorize."<sup>545</sup> This is exactly what happens when a person sets up an IMG-link on its Web site. The fair dealing exception is predicated on the assumption that in principle an act of infringement has been committed and this act is then excused by the exemption.<sup>546</sup> In other words, the user has first done an act which "the owner has the exclusive right to do". However, this solution would seem to be an effort to make the Copyright Act suitable for the new technical situation. To be

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<sup>543</sup> Dean, *Handbook of South African Copyright Law*, p. 1-51.

<sup>544</sup> Sections 15(4) and 12(1) of the Act.

<sup>545</sup> Section 23(1) of the Act.

<sup>546</sup> Dean, *Handbook of South African Copyright Law*, p. 1-51.

objective, a contributory infringement does not make sense without a person finally infringing copyright. In the United States the situation appears to be quite clear. Contributory copyright infringement by the linking party always requires direct infringement by the user.<sup>547</sup> It is this principle that causes the main difficulty of applying copyright law to linking disputes. The problem of contributory infringement also exists in connection with the liability of online providers. It will be discussed further on in more detail.<sup>548</sup>

#### (b)(iii)(2) Adaptation Right

The images and graphics transported into the linking Web site can be shown in a completely different context than intended by their author. This may infringe his exclusive right to adapt his work. "Adaptation" in relation to an artistic work includes a transformation of the work in such a manner that the original or substantial features thereof remain recognisable.<sup>549</sup> However, as explained above, this is only a specification, in addition every alteration of the work may constitute an adaptation. Whether inlining of images constitutes an adaptation under these requirements depends on the use in the certain circumstances. The author may not prevent or object to modifications to the work which are absolutely necessary on technical grounds or for the purpose of commercial exploitation of the work.<sup>550</sup> If a main feature of the image is the context in which it is shown, than inlining it into a different context should infringe on the adaptation right. However, this is always to be determined by considering the circumstances in every case.

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<sup>547</sup> See *Lewis Galoob Toys Inc v Nintendo of America Inc*, 780 F.Supp. 1283 at 1298 (N.D. Cal. 1991), stating that with "absent infringement, there is no infringement".

<sup>548</sup> See chapter 4.3.3.

<sup>549</sup> Section 1(1) sv "adaptation" (c) of the Act.

<sup>550</sup> Dean, *Handbook of South African Copyright Law*, p. 1-63.

(b)(iii)(3) Right of Paternity

Under his right of Paternity the author is entitled to "claim authorship of the work".<sup>551</sup> Inline links can create liability because the viewer cannot distinguish that the image belongs to another site and the viewer can easily be confused as to the origin and ownership of that image. The failure to respect that requirement violates the author's right of paternity.<sup>552</sup> Therefore the author has the right to claim authorship of the work.

(b)(iv) Frames

As with IMG links, the framing site does not technically make a copy of the framed site. The framing site tells the user's computer from where to retrieve an original copy of the framed site, and the site appears within the frame on the user's screen without any reproduction.<sup>553</sup> The first problems concerning frames already lead to a legal dispute between six media companies, The Washington Post, Time, CNN, Times Mirror, Dow Jones & Co and Reuters, and a news company called TotalNews.<sup>554</sup>

(b)(iv)(1) Washington Post Co v Total News Inc

TotalNews operates a Web site that provides links to a variety of news sources, including those operated by the plaintiffs.<sup>555</sup> Using frames, TotalNews has divided its Web page into four independent windows. A vertical frame on the right-hand side includes the names of eight of the

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<sup>551</sup> Section 20(1) of the Act; see also Dean, *Handbook of South African Copyright Law*, p. 1-63.

<sup>552</sup> Dean, *Handbook of South African Copyright Law*, p. 1-63.

<sup>553</sup> Beal, *The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solutions*, p. 718.

<sup>554</sup> *Washington Post Co v Total News Inc*, Law Journal Extra!, <http://www.ljx.com/internet/complain.html> (last visited March 1999); Nieves, *Hyperlinks, Frames and Meta-tags: An Intellectual Property Analysis*, p. 20.

<sup>555</sup> The Total News site was designed to consolidate over 1200 news sources into one location, thus comprising a comprehensive source of news; see Rose, *Unlawful Linking and Framing*, p. 7. The site is available at <http://www.totalnews.com> (visited June 1999).

plaintiff's news services. Each name acts as a hyperlink to the corresponding news service. In the lower right-hand corner was a small, rectangular frame that contains the TotalNews logo, while a frame along the bottom of the screen is set aside as advertisement space that TotalNews sells to generate revenues.<sup>556</sup> The fourth and largest frame, located in the left-centre part of the screen, is the news window.

When a user selects a particular news service by clicking on its hyperlink, the contents of that site would be displayed in the news window, but still within the TotalNews "frame". Thus, for example, if a user clicked on the Washington Post link, the news window within the TotalNews frame would fill with an electronic version of The Washington Post newspaper linked in from The Washington Post's own Web site. However, the *totalnews.com* URL would remain in place at the top of the frame and advertising sold by TotalNews would remain in place at the bottom of the frame. Furthermore, all the while the linked-to news article is displayed in the news frame, the user is seeing only Total News advertising and logo. Therefore the plaintiffs alleged that use of defendants Web site resulted in loss of revenue.

The plaintiffs filed a lawsuit on February 20, 1997 in a U.S. District court accusing TotalNews for copyright infringement, trademark infringement, trademark dilution, unfair competition, and tortious interference with third-party relations.<sup>557</sup> In the plaintiffs cause of action for copyright infringement the plaintiffs alleged that the defendants infringed the plaintiffs copyrighted material by republishing the material or by making it available to the public without first receiving permission to do so. TotalNews claimed to be unable to raise the funds to defend themselves and settled the lawsuit by agreeing to provide links to the plaintiff's sites without frames.<sup>558</sup> When a user now selects a link to one of the plaintiff's Web pages, these pages are displayed on the

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<sup>556</sup> Rose, *Unlawful Linking and Framing*, p. 7.

<sup>557</sup> Rose, *Unlawful Linking and Framing*, p. 7. The complaint is available on the Internet at <http://www.ljx.com/internet/complain.html> (visited June 1999).

<sup>558</sup> Stipulation and order of settlement and dismissal, *The Washington Post Co v Total News, Inc.*, No. 97 Civ. 1190 (S.D.N.Y. June 6, 1997) is available at <http://www.bna.com/e-law/cases/totalset.html> (visited June 1999).

entire screen and the URL address in the browser's display changes to the source of the information.

#### *(b)(iv)(2)* Adaptation Right

Framing might infringe the adaptation right. On one level, it may be said that combining the content of the framed page with that of the own page may create a derivative work.<sup>559</sup> Further, most browser programs have the effect that the framed content is compressed or concatenated. This may be considered a derivative work, even without reference to the surrounding frames. Third, the framing practice has the effect to leave the URL of the linking site in the browser's location indicator, what may constitute another adaptation of the original work.

In case that framing indeed constitutes adaptations of the material published on the Web, the framing party can not be held liable for direct copyright infringement because it does not create the adaptation itself. As in all cases concerning linking, technically, there is no copy of the framed site passing the computer or the server of the linking party. It is rather the user that creates the framed screen by loading the site of the linking party. As in the case of inline links, it should be argued that the implied licence granted by the author of the framed material concerning the use of this material in foreseeable manners does not comprise framing. In order to visit a site it is not necessary to frame it. The technique of framing is useful for some Web sites to offer a more structured and easier to survey Web page. Most often framing is used to guide through the internal pages of a Web site, for example where the left side of the screen displays a table of contents whereas the main frame shows the content of the different sub-pages.<sup>560</sup> Framing, thus, makes it more

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<sup>559</sup> O'Rourke, *Legal Issues on the Internet: Hyperlinking and Framing*, p. 3, stating that any work consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship, is a derivative work. The distortion or alteration caused by framing, if significantly enough, could likely be considered derivative or an entirely new creation.

<sup>560</sup> See, for example, the Web site of the World Intellectual Property Organisation (WIPO) at <http://www.wipo.org/eng/main/htm>. Commercial entities usually have an additional frame

convenient for users to navigate through documents published on the Web. If frames are used to display contents of different Web sites, however, this usually constitutes a disadvantage for the author of the framed site because his work is displayed in a different context, with different graphics, texts and advertisements surrounding it. Typically, the author of a Web document would therefore not agree on having his page framed. However, even if the framing site were considered a derivative work of the framed site, the creator of the framing site may still not be liable for copyright infringement. The user actually does the framing and similar to the case of hyperlinking, the browsing usually will be excused by the fair dealing principle of the Act. Thus, without direct infringement of the user, the instigator cannot be held liable for contributory infringement.

The question of contributory infringement regarding framing already lead to a lawsuit in the United States.<sup>561</sup> In refusing to dismiss a complaint that framing constituted copyright infringement, Judge Audrey Collins noted that existing precedent does not conclusively decide the issue of whether the use of a frame constitutes creation of a derivative work. Because the user's conduct is likely to be protected under the United States copyright doctrine of fair use, it is argued that if the user is not a direct infringer then the site that provides the ability to frame cannot be a contributory infringer.<sup>562</sup>

However, many cases that involve framing are likely to implicate trademark concerns and/or unlawful competition.<sup>563</sup> The continuing display of the address of the framing site may confuse users as to origin, a traditional concern of trademark law. Surrounding the framed site with content from the framing site may likewise confuse users as to origin.

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containing advertising that is displayed above or below the main frame.

<sup>561</sup> *Futuredontics Inc v Applied Anagramic Inc* (No. CV-97-6691 ABC (MANx, C.D. Calif.)).

<sup>562</sup> See also O'Rourke, *Legal Issues on the Internet: Hyperlinking and Framing*, p. 4.

<sup>563</sup> See also O'Rourke, *Legal Issues on the Internet: Hyperlinking and Framing*, p. 4.

(b)(iv)(3) Moral Rights

The right that might possibly be infringed in the case of frames and also in the case of links, is the moral right of the author. An infringement on the author's moral rights constitutes an infringement of copyright.<sup>564</sup> With regard to frames, the linking party guides the user to the linked-to site from a different perspective and this could result in a distortion, mutilation or other modification of the work.<sup>565</sup> This might occur when the content of the linked-to Web site is suddenly framed by advertising, or different advertising. Furthermore a work could be inserted in a Web site in a way that reveals it in a different (negative) light.<sup>566</sup> Especially the latter would be clearly "prejudicial to the honour or reputation of the author."<sup>567</sup> This is because the author's reputation may depend to some extent on the way in which the work is presented or perceived.<sup>568</sup> For example in the *TotalNews* case,<sup>569</sup> the viewer of the new window of the TotalNews frame was forced to scroll either up and down, or from side to side to see the whole of the original, inserted site. The plaintiffs alleged that defendant's practice of framing caused distortion and alteration of the original site content. The plaintiffs contended such alteration of content deprives viewers of seeing the material in the manner plaintiffs intend it to be viewed.

Furthermore, because the URL (Web address) of the linking site continues to be displayed in the browser's location indicator on the top of the screen, although the user looks at a different Web site of different origin, he could easily get the impression that the content he views originates from the linking

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<sup>564</sup> Section 20(2) of the Act.

<sup>565</sup> See section 20(1) of the Act.

<sup>566</sup> For example if a link is set up on a right-wing extremist Web site, the viewer of the content of the linked-to site possibly get the impression that the linked-to site is somehow connected to right-wing extremist ideas.

<sup>567</sup> Section 20(1) of the Act.

<sup>568</sup> Smith, *Copyright Companion*, p. 27.

<sup>569</sup> *Washington Post Co. v Total News Inc.*, 97 Civ. 190 (PKL) (S.D.N.Y., complaint filed Feb. 20, 1997), available at <http://www.ljx.com/internet/complain.html> (last visited March 1999)

site.<sup>570</sup> This may infringe the right of recognition of the ownership of the author, hence he has the right to claim authorship of the work.<sup>571</sup>

This result appears justified also because of the character of the medium World Wide Web. One of the ideas of the Web is to create a sort of interlaced database of knowledge. In the ideal case, the information search takes place by the fact that the user "jumps" from one document to the other, only by clicking on the hyperlink. If one would give a complete control to the individual information supplier, then the Web would be seriously impaired in its function. In the extreme case, a meaningful use would no longer be possible, since the discovery of documents are mainly guaranteed by the set up of hyperlinks. The more hyperlinks exist between the individual documents, the more user friendly, more versatile and more useful will the Web be. As far as that goes, a restrictive interpretation with regards to a control over the set up of links is necessary to maintain the advantages of the medium Web. Nevertheless, a justified interest of the author to avoid an infringement of his rights can be given in the isolated case.

Finally Web site owners have a strong interest in preserving their own advertising. Framed links that obscure the original advertising on a linked page and deep hyperlinks that bypass a site's advertising may infringe on this ownership interest and cause a loss of advertising revenue.<sup>572</sup> One commentator has stated that control over how visitors enter and move through a site is critical to a company's ability to maximise sales and profits because of the power to ensure that all visitors view its advertising.<sup>573</sup>

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<sup>570</sup> Raysman/Brown, *Dangerous Liaisons: The Legal Risks of Linking Web sites*, p. 4.

<sup>571</sup> Section 20(1) of the Act.

<sup>572</sup> Beal, *The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solutions*, p. 708.

<sup>573</sup> See Barry D. Weiss, *Metasites Linked to IP Violations: Web Sites Framed or Linked to Other Sites May Enjoy Greater Exposure, but Some are Suing the Framing Sites for Infringement*, U.S.

### (c) Recommendations

To avoid or reduce copyright claims, a preventative measure could be a common disclaimer. Such a disclaimer can go far towards reducing the likelihood of confusion, if the Web site owner incorporates, for example, online terms and conditions, which exclude any implied licence and which limit and restrict the use of the Web site content and provide that no linking or framing of that content may take place without the express consent of the Web site operator. A statement expressing the hyperlink owner's willingness to remove a hyperlink immediately upon request by the linked-to site owner may also be an effective provision. This method may prevent an upset Web site owner from immediately filing an infringement suit, instead requesting the removal of a hyperlink or inline link if they find its use inappropriate. As well, disclaimers should be placed in an easily accessible area and not hidden within the mass of information on a Web site. Link providers should inform the viewer that he or she is jumping to a new location. A site owner who wants to find out which sites link to his or hers cannot tell simply by looking at her site, but she can find the links by visiting Alta Vista,<sup>574</sup> and typing "Link:(*Web address*)". This command will tell the site owner where all links to her site are coming from.

Fortunately, with advancements in technology, one newly available means of preventing an infringement suit from occurring is for the Web page owner to implement Web page protecting software. One example of this useful software is Netscape Server's software tools.<sup>575</sup> These tools can be used to design a Web page to accept only those universal resource locator requests originating at a specific address.<sup>576</sup> All other URLs, which are referred to the Web page, return only the 404-file not found message. This mechanism greatly increases the Web page owner's control over his or her page. Another technical measure to curb linking sites was used, for example, in the above discussed *TicketMaster* case to block Microsoft's Seattle Sidewalk visitors to

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National L.J., July 21, 1997, at B9.

<sup>574</sup> At <http://www.altavista.digital.com> (last visited May 1999).

<sup>575</sup> Rose, *Unlawful Linking and Framing*, p. 11.

<sup>576</sup> Rose, *Unlawful Linking and Framing*, p. 11.

jump to one of Ticketmaster's internal pages using deep links.<sup>577</sup> Ticketmaster has intercepted the link between Seattle Sidewalk and its own internal page, and has erected an intercept page that states, "This is an unauthorized link and a dead end for Sidewalk."<sup>578</sup> The site further instructs, "You cannot connect to Ticketmaster Online directly through Microsoft Sidewalk"; and has a link to Ticketmaster's homepage.

One new technological control is the use of dynamic Web pages that have periodically changing URLs.<sup>579</sup> If the URLs of the sub pages are changing, users are only able to access the content of the Web site over the home page.

Another system is SiteShield, which is a new concept in Web content protection. SiteShield enables content providers to place copyright protected images on Web pages, while reducing the fear that they can easily be stolen and re-used. Employing proprietary server-based technology, SiteShield allows Webmasters to simply indicate which images or other content need protection. Technology also poses other solutions by making it possible for a Web site owner to implement the use of passwords and registration to stop access to any particular Web page they choose.

#### **4.3.2.4 Interim Conclusion**

It is evident that the law in this area is just starting to develop, and there are no definitive answers.<sup>580</sup> In conclusion it may be said that hyperlinks in general do not infringe on copyright, mainly because the underlying technology provides the possibility to establish links without copying protected material in a traditional way. An evaluating consideration implies that this result is reasonable. Generally, linking does not interfere with the right of a copyright

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<sup>577</sup> *Ticketmaster Corp v Microsoft Corp*, No. 97-30555 RAP (C.D. Cal. filed Feb. 12, 1998).

<sup>578</sup> Dead End Page, at <http://www.ticketing.ticketmaster.com/restricted/index.html> (visited Nov. 1998).

<sup>579</sup> Raysman/Brown, *Dangerous Liaisons: The Legal Risks of Linking Web sites*, p. 4.

<sup>580</sup> See Rose, *Unlawful Linking and Framing*, p. 5; O'Rourke, *Legal Issues on the Internet: Hyperlinking and Framing*, p. 14.

owner to exploit his work. The linking party only provides facilitated access to different sites without profiting from this at the expense of the linked-to parties. Moreover, the linking practice is necessary, for it is essential to how the Web functions. Hyperlinks are vital to the infrastructure of the Web because they allow an effective and quick retrieval of information that would otherwise be shattered around connected computers all over the world. A prohibition or restriction of the use of hyperlinks would certainly destroy a main feature of the Web.

The same argumentation applies to "deep links". There is no basis for copyright infringement by establishing links that circumvent the homepage of a Web site. On the one hand, the interest of Web site providers to maintain navigational control over their sites and guide visitors from their home page through the sub pages is remarkable. On the other hand, however, most Internet sites of bigger organisations or academic institutions consist of several hundred sub pages.<sup>581</sup> Quick and effective retrieval of information would not be gained by establishing links only to the home pages, because then the user still would have to navigate through a vast collection of information until he finds his point of interest. The remaining problem with deep links is, however, that the home page is circumvented. This might result in a loss of advertising revenue. Therefore it is argued, that by causing another loss of advertising revenue through deep links, the linker has done the equivalent of climbing into the third floor rear window after the "shop owner" has locked the front door.<sup>582</sup> This argument might be justified regarding the importance of being often "hit" to be considered as a prime real estate site which are relatively costly sites at which to advertise. However, advertisement can be even more effective if it reaches exactly the users of their target group. This would be the case, if the linked-to sub page is advertised in connection with the content. But above all, if the Web site owner does not adequately prevent deep linking through a technical measure, deep links should be permissible.

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<sup>581</sup> For example the Web site of CNN, at <http://www.cnn.com>, or Microsoft, at <http://www.microsoft.com> (both visited Aug 1999).

<sup>582</sup> Rose, *Unlawful Linking and Framing*, p. 6.

As mentioned above, when publishing material on the Web the copyright owner of these documents implicitly agree on the use of it in foreseeable manners, even though this might otherwise infringe on his copyright. Simple hyperlinking has to be regarded as such foreseeable use. Today, nearly every page contains links to different documents. It is even argued that the *raison d'être* of the Web is linking.<sup>583</sup> Therefore it should be concluded that with posting material on the Web anyone consents to simple links set up to his document. It is clear, however, that links transporting a user to a different location without warning may subject the linking party to copyright infringement liability. In such situations, however, commercial site owners should obtain permission from the linked-to site or at the very least, should make it clear to viewers that they are jumping to a different location. Copyright owners know how the Web works. In this sense, there is no expectation of privacy. A Web site is comparable to a shop in a shopping mall. A person providing a Web site expects and encourages people to "enter". Passers-by do not need permission of the shop owner to view the contents of a given site even though they are technically entering private property. Based on the current state of the law, it would be burdensome to require permission to simply link to other sites.

Link providers may be able to successfully argue that links are necessary, as they are the most fundamental and basic function of the Internet. Link providers, however, may find it more difficult to defend against charges of copyright infringement when the material is embedded within frames or by using inline links. Considering the impact of frames or inline links on the author's material this result appears to be justified. With IMG links and frames the user has no possibility to learn from the origins of the material displayed. With common knowledge of the Web he may even have the false impression that the content was created by the linking site. In sum, balancing the interest of the author of the material copied or adapted and that of the linking party leads to the conclusion that there is no valuable interest on the side of the latter that may outweigh the necessity to protect intellectual property.

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<sup>583</sup> Smith, *Internet Law and Regulation*, p. 28.

### 4.3.3 Liability of Online Providers

An issue of enormous significance for those who participate in the digital transmission of protected works and achievements is that of who is liable for any copyright infringement that may occur. Participants will only undertake the necessary investments if the risk of being sued for damages and/or an injunction is calculable.<sup>584</sup> As described above, the transmission of material on the Internet involves several copies on interim computers or on the cache of storage devices. Furthermore the material of the Internet accessible on private or commercial Web sites is mainly stored on storage devices provided by different online providers. If the use of these materials in the course of downloading, viewing, or other transmission of the work through the Internet infringe any right of the copyright owner, a difficult issue arises as to who should be responsible for the infringement of copyright.

Multiple actors may be connected with a particular copy or copies of a work on the Internet, for example, when a work is posted to a bulletin board service (BBS). Five actors could be involved in this process: The user who posted the work, the BBS operator, the Internet service provider (ISP) who provides storage device for the BBS operator, a user downloading a copy of the work from the BBS, and perhaps the operator of node computers through which a copy of the work may pass during the course of such downloading. Which one or more of these actors should be deemed to have made the copy or copies? The difficulty stems from the fact that many such copies will typically be made automatically and the third party, such as an ISP, is generally only providing storage place.<sup>585</sup>

Much of the Internet copyright debate in recent years has centred around the issue of copyright liability of ISPs, BBS operators and other service providers for infringing activities taking place through their facilities.<sup>586</sup> Online providers

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<sup>584</sup> Dreier, *Copyright Law and Digital Exploitation of Works*, p. 15.

<sup>585</sup> Morano, *Legislating in the Face of New Technology: Copyright Law for the Digital Age*, p. 1421.

<sup>586</sup> The question of the liability of online providers lead to several lawsuits all over the world, mainly in the United States, and will be discussed below. Although no appellate court has yet had the opportunity to rule on the issue, there have been a number of significant district court decisions

usually are not involved in the exploitation of the works on the Internet, at least they provide the storage devices. The key legal question is therefore whether these providers are liable for infringements conducted by the users. However, to understand the legal problems of this issue, a basic knowledge of the different online providers is essential.

#### **4.3.3.1 The Individual Providers**

The different online providers on the Internet which are of interest for this issue are Internet service provider, bulletin board operator and Web site provider. All these online providers have in common, that they provide storage place accessible via the Internet.<sup>587</sup>

##### **(a) Internet Service Provider**

Home and commercial users typically access the Internet via an Internet service provider (ISP), also known as an Internet access provider.<sup>588</sup> A user needs one set of Internet-compliant software and only one telephone connection to a local ISP. An ISP can be anything from a small, local operator to one of the large commercial online services, depending whether there is full Internet access or access only to certain services, such as e-mail or access to the Web. ISPs are providing often more sophisticated services, such as development of Web sites for customers, updating these sites, the "hosting" of Web sites on the ISP's server and the provision of security systems to protect the customer.<sup>589</sup> The Web site may be uploaded and stored as a file on the ISP's server. The type of data stored on the ISP server can vary from text

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dealing with the issue of online provider liability.

<sup>587</sup> Number of online providers (hosts) in 1969: 4, in 01/1989: 80,000; in 01/1998: 29,670,000 and in 03/1999: 43,200,000 (see <http://info.isoc.org/> (last visited March 1999)).

<sup>588</sup> Microsoft, *Internetworking*, p. 306; Cahoy, *New legislation regarding on-line service provider liability for copyright infringement*, p. 2.

<sup>589</sup> Smith, *Internet Law and Regulation*, p. 9.

documents to graphics to computer programs or any other kind of data.<sup>590</sup> The main function of the ISP is to set up the connection to the Internet and their facilities and maintain it. In fact, employees of ISPs never see most of what they transmit to or receive from users. Agreements between other ISPs guarantee an exchange traffic through different networks. The known ISPs in South Africa are Imaginet, UUnet, Internet Africa and Icon.<sup>591</sup>

(b) Bulletin Board Operators

Bulletin board services (BBS) were traditionally accessed directly through telephone modems but many are now connected to the Internet and may be accessed through this medium in the same way that one accesses a Web site.<sup>592</sup> Bulletin board operators rent storage place from an Internet service provider as long as they do not have own facilities to offer sufficient storage place. An ISP can also operate a bulletin board system, in which case the BBS files would also be stored on the ISP's computer.<sup>593</sup>

A computer bulletin board allows users to post and read electronic messages by accessing a central computer via phone lines. The content of an electronic message can be, for example, a document, software, digitised music, scanned pictures, or other information capable of being stored and interpreted by a computer.<sup>594</sup> Users post messages on the bulletin board through uploading and receive information from the bulletin board through downloading. On the one side, bulletin board technology, with its ability to offer vast quantities of information quickly, became very popular. On the other side, illegal exploitation of copyrighted materials on these boards becomes a serious problem. High quality digitised pictures, digitised music, and software are all capable of being uploaded and downloaded from computer bulletin

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<sup>590</sup> Smith, *Internet Law and Regulation*, p. 7.

<sup>591</sup> In South-Africa *imaginet* offers access in over 300 towns and cities.

<sup>592</sup> Cahoy, *New legislation regarding on-line service provider liability for copyright infringement*, p. 2.

<sup>593</sup> Cahoy, *New legislation regarding on-line service provider liability for copyright infringement*, p. 2.

boards, and users of bulletin boards have employed the technology to exchange a wide variety of copyrighted material.<sup>595</sup> These processes, without the permission of the copyright owner, clearly infringe copyright law. However, it is still unclear whether bulletin board operators are liable for the copyright infringement committed by users.

### (c) Web site Operator

Similar to bulletin boards, unauthorised material can also be exploited through a Web site. For example in the United state case *Playboy Enterprises Inc v WebbWorldInc*,<sup>596</sup> the court addressed the liability of operators of a Web site for distributing unauthorised copies of photographs from the Playboy magazine. The defendant used a software program to select materials from Internet newsgroups and load the materials onto his server. The court found WebbWorld directly liable for violating Playboy's reproduction, distribution and display rights. The court rejected the defendant's defence that it served as a mere conduit between subscribers and newsgroups. The court found that the defendant functioned as an online store that re-packaged and sold images. The court also found that even though some of the editorial functions were automated, the defendant affirmatively caused copies to be made, and also controlled the content of the site.

#### **4.3.3.2 Legal Examination**

The legal problem for online providers must be seen in the facility offering storage place, because some users upload or download information, which infringes the copyrights of others. The question that a online provider must face is whether by acting as a conduit for the infringer they are themselves

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<sup>594</sup> Dobbins, *Computer Bulletin Board Operator Liability for Users' Infringing Acts*, p. 217.

<sup>595</sup> Dobbins, *Computer Bulletin Board Operator Liability for Users' Infringing Acts*, p. 218 and 219.

<sup>596</sup> 1997 WL 817312 (N.D. Tex., 1997).

liable for direct or contributory infringement of these copyrights. The liability of online providers may result in relation to four principal Internet functions:

- Conduit activities: sending the communications initiated by others across a provider's system without altering their content.
- Caching sites: storing a site or portion of a site on a provider's system, usually to facilitate access by others.
- Providing server space: providing computer facilities on which third parties may post content of their choice (hosting Web sites, chatrooms, bulletin boards).
- Providing location tools: providing (hypertext) linking aids between sites and directories of Internet content.

In order to determine whether an ISP, BBO or other provider of material on the Internet is liable for the uploading and downloading of copyrighted material on her server, it first must be determined whether the operator's actions have directly infringed on the rights of a copyright owner or whether a theory of third-party liability must be applied.

#### (a) United States Case Law

The legal system which has so far produced most of the actual cases about Internet copyright, is that of the United States.<sup>597</sup> These cases are immensely valuable in showing the kinds of questions which are likely to arise elsewhere.

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<sup>597</sup> Five well-known and important cases will be introduced and can be found at <http://www.bna.com/e-law/cases.html> (last visited July 1999). For further interest the reader is referred to *Sega Enterprises Ltd v Sabella*, 1997 Copyright L. Dec. (CCH) P 27, 648 (N.D. Cal. Dec. 18, 1996) (BBS Operator was not held direct liable because there was no evidence that the operator did any unauthorised copying herself); *Playboy Enterprises, Inc v Webbworld, Inc*, 968 F.Supp. 1171, 1177 (N.D. Tex. 1997) (A company operating a Web site was held directly liable for the posting of copyrighted material on its site which could be downloaded by subscribers); *Playboy Enterprise, Inc v Sanfilippo*, 46 U.S.P.Q.2d (BNA) 1350 (S.D. Cal. 1998) (The operator of a Web site was also held directly liable for the making available of the plaintiff's copyrighted images on his Web site) and *Mairobie-FL, Inc. v National Association of Fire Equipment Distributors and Northwest Nexus Inc.*, 983 F. Supp. 1167, 45 U.S.P.Q.2d (BNA) 1236 (N.D. Ill. Nov. 13, 1997). (Web site operator directly infringed plaintiff's exclusive right to reproduce and publicly distribute their material, however, the ISP, where the Web site was stored, only provided the means to copy and therefore was not held liable for direct infringement). See also Cahoy, *New Legislation regarding on-line service provider liability for copyright infringement*, p. 1.

Within the litigations, copyright owners have sought to hold Internet service providers and bulletin board operators liable on theories of direct liability<sup>598</sup>, contributory liability,<sup>599</sup> and vicarious liability.<sup>600</sup> The U.S. courts have just begun to create the precedent, which will govern future litigation in this area, but much of it is incomplete. But it is necessary to be somewhat cautious in assuming that courts in South Africa would necessarily reach the same conclusion.<sup>601</sup>

(a)(i) *Playboy Enterprises, Inc v Frena*

The *Playboy Enterprises, Inc v Frena* case<sup>602</sup> was one of the first cases to have dealt with the issue of online service provider liability. Frena was an operator of a bulletin board service (BBS) that displayed and made 170 computerised images of Playboy Enterprises, Inc.'s (Playboy) copyrighted photographs available for users to download and upload. Even though Frena did not make the copies himself, the court found that the defendant had directly infringed Playboy's exclusive right to display and distribute these images. Frena argued that it was the subscribers, not Frena, which had uploaded the infringing photographs onto the bulletin board. Furthermore,

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<sup>598</sup> To establish a claim of direct copyright infringement in the U.S., a plaintiff must first show (1) ownership of a valid copyright and (2) copying of protectable expression by the defendant.

<sup>599</sup> Under the U.S. Copyright Act "contributory infringement" exists when "one who, with knowledge of the infringing activity, induces, causes or materially contributes to the infringing conduct of another." Contributory infringement depends on a connection to the infringing activity and not to the infringer. See Dobbins, *Computer Bulletin Board Operator Liability*, p. 224, 225; *Gershwin Publishing Corp. v Columbia Artists Management Inc.*, 443 F.2d 1159, 1162 (2d Cir. 1971).

<sup>600</sup> The doctrine of vicarious liability, based on the tort theory of respondeat superior, is similar to that of contributory infringement in that it is not explicitly in the U.S. Copyright Act but is impliedly incorporated due to its nearly universal application in tort law. A party may be vicariously liable for the infringing act of another if it (1) has the right and ability to control the infringer's acts and (2) receives a direct financial benefit from the infringement. Unlike contributory infringement, knowledge is not an element of vicarious liability. See *Religious Technology Center v Netcom On-Line Communication Services* 907 F.Supp. 1375, 37 U.S.P.Q.2d (BNA) 1556 (N.D. Cal. 1995); Cahoy, *New legislation regarding on-line service provider liability for copyright infringement*, p. 22.

<sup>601</sup> For example in the United States, contributory infringement is determined "when one who, with knowledge of the infringing activity, includes, causes or materially contributes to the infringing conduct of another."; see Lee, *Toward a More Balanced Copyright Policy*, p. 39. However, under the South African Copyright Act, contributory infringement does not require actual knowledge, see Smith, *Copyright Companion*, p. 19.

<sup>602</sup> *Playboy Enterprises, Inc. v Frena*, 839 F.Supp. 1552, 29 U.S.P.Q.2d (BNA) 1827 (M.D. Fla.

Frena argued, that he had removed the infringing photographs and monitored the bulletin board to prevent the posting of additional infringing photographs once he had received notice of the infringement.<sup>603</sup> The court nevertheless found that there was "irrefutable evidence" of direct copyright infringement on the ground that providing access to the computer bulletin board was equivalent to "distributing" and "displaying" the infringing photos.<sup>604</sup> The court reasoned that Frena's lack of awareness of the infringement was irrelevant because "knowledge or interest is not an element of (copyright) infringement."<sup>605</sup> Frena could not avail himself of the fair use exception to infringement because he had made the material on the bulletin board available for a commercial purpose. However, the conclusion of the court in this case seems to impose an impossible burden on the providers and operators to screen all uploaded files.<sup>606</sup>

Although precedents are few, it appears that courts have moved away from Frena's direct liability approach when providers lack knowledge of the infringing activity. In the typical situation, a bulletin board operator provides the service with no intention to further infringing activity and often has no knowledge that the infringing activity is taking place. Instead, the service provider's conduct is scrutinised under theories of contributory and vicarious liability. The reach of Frena may be limited because the bulletin board service was apparently one devoted to photographs, much of it of adult subject matter, and subscribers routinely uploaded and downloaded images therefrom. Thus, the court may have viewed Frena as a more direct participant in the infringement, having set up a bulletin board that was devoted to the kind of activity that would foreseeable lead to infringement. It is also

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1993).

<sup>603</sup> *Playboy Enterprises, Inc. v Frena*, 839 F.Supp. 1554, 29 U.S.P.Q.2d (BNA) 1829 (M.D. Fla. 1993).

<sup>604</sup> *Playboy Enterprises, Inc. v Frena*, 839 F.Supp. 1552, 29 U.S.P.Q.2d (BNA) 1827 (M.D. Fla. 1993).

<sup>605</sup> *Playboy Enterprises, Inc. v Frena*, 839 F.Supp. 1556, 1559, 29 U.S.P.Q.2d (BNA) 1831, 1834 (M.D. Fla. 1993) ("innocent infringement is infringement nonetheless.")

<sup>606</sup> Lee, *Toward a More Balanced Online Copyright Policy*, p. 45.

argued, that the Frena court "overextended" the meaning of the display and distribution rights to find direct liability for a bulletin board operator.<sup>607</sup>

(a)(ii) The NetCom case

In *Religious Technology Center v NetCom On-Line Communication Services*<sup>608</sup> (Netcom case) the court addressed the issue whether the defendant (Netcom) should be directly liable for infringement because they offered access to a UseNET newsgroup,<sup>609</sup> which temporarily stored uploaded copies of the plaintiff's copyrighted works. The works were posted to the UseNET newsgroup *alt.religion.scientology* by an individual user named Erlich. Netcom, an Internet service provider, then automatically copied the posted works onto its computer and onto other computers on the UseNET.<sup>610</sup> The work was posted eleven days on Netcom's computer and three days on the UseNET computer. Netcom neither created nor controlled the content of the information available to its subscribers, thus Netcom had no knowledge of any infringements. In refusing to find direct infringement on the part of Netcom, the court reasoned that such a result would lead to "unreasonable liability" because "Netcom did not take any affirmative action that directly resulted in copying plaintiffs works other than by installing and maintaining a system whereby software automatically forwards messages received from subscribers onto the Usenet, and temporarily stores copies on its system."<sup>611</sup> The role of Netcom in the infringement was therefore nothing more than setting up a system that is necessary for functioning of the Internet. The court further reasoned that such copying was essential to the operation of the

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<sup>607</sup> Dobbins, *Bulletin Board Operator Liability*, p. 222, with references to *Columbia Pictures Indus v Aveco, Inc*, 800 F.2d 59, 64 (3rd Cir. 1986) and *Iowa State University Research Foundation v ABC*, 621 F.2d, 57, 62 (2nd Cir. 1980), where direct liability applied only for parties that have played a conscious, active role in the act that constitutes "display" or "distribution". See also McCabe, *Internet Copyright Infringement*, p. 5.

<sup>608</sup> *Netcom case*, 907 F.Supp. 1361, 37 U.S.P.Q.2d (BNA) 1545 (N.D. Cal. 1995). See also McCabe, *Internet Copyright Infringement*, p. 3.

<sup>609</sup> Usenet discussion groups consist of continuously changing collections of messages that are routed from one network to another across the global net, with no centralised location at all; Post, *Governing Cyberspace*, p. 164.

<sup>610</sup> *Netcom case*, 907 F.Supp. 1367, 37 U.S.P.Q.2d (BNA) 1549 (N.D. Cal. 1995).

<sup>611</sup> *Netcom case*, 907 F.Supp. 1370, 37 U.S.P.Q.2d (BNA) 1551 (N.D. Cal. 1995).

system, and that "some element of volition or causation" was necessary to a finding of direct liability.<sup>612</sup> The plaintiff had presented evidence that showed that at least some of the posted infringing material contained the plaintiff's copyright notice, and that Netcom continued to post infringing material after plaintiff had notified Netcom of the infringing activity. The court, however, held that this warning did not alter the outcome with respect to direct infringement liability.<sup>613</sup> Based on a lack of causation, the court found Netcom and the bulletin board operator did not directly infringe the Religious Technology Center's copyright. Instead, the court held that both Netcom and the bulletin board operator may be liable for contributory infringement because they both provided services allowing the distribution of the infringing copies.<sup>614</sup>

The court also reviewed the plaintiff's claims against Netcom under a theory of vicarious liability but found them lacking because Netcom received no financial benefit from the posting of the material, because Netcom only charged a flat fee for its service. The court reasoned that when "a defendant rents space or services on a fixed rental fee that does not depend on the nature of the activity of the lessee, courts usually find no vicarious liability because there is no direct financial benefit from the infringement."<sup>615</sup>

(a)(iii) *Sega Enterprises Ltd v Maphia*

In *Sega Enterprises Ltd v Maphia*,<sup>616</sup> the defendant offered copies of Sega's copyrighted video games on Maphia's bulletin board service. Unlike the Netcom case, the defendant particularly knew of the uploading and downloading of unauthorised copies of the video games.<sup>617</sup> In this case, the

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<sup>612</sup> *Netcom* case, 907 F.Supp. 1370, 37 U.S.P.Q.2d (BNA) 1551 (N.D. Cal. 1995).

<sup>613</sup> *Netcom* case, 907 F.Supp. 1370, 37 U.S.P.Q.2d (BNA) 1551 (N.D. Cal. 1995).

<sup>614</sup> *Netcom* case, 907 F.Supp. 1370, 37 U.S.P.Q.2d (BNA) 1551 (N.D. Cal. 1995); "provided that the plaintiff could prove that Netcom had knowledge of, or was on notice with respect to, an infringement."

<sup>615</sup> *Netcom* case, 907 F.Supp. 1375, 37 U.S.P.Q.2d (BNA) 1556 (N.D. Cal. 1995).

<sup>616</sup> *Sega Enterprises Ltd. v Maphia* 948 F. Supp. 923, 41 U.S.P.Q.2d (BNA) 1705 (N.D. Cal. 1996), see (<http://www.bna.com/e-law/cases/sega2.html>) (last visited May 1999).

<sup>617</sup> *Sega Enterprises Ltd. v Maphia* 948 F. Supp. 928, 932, 41 U.S.P.Q.2d (BNA) 1709, 1712 (N.D. Cal. 1996).

bulletin board operator and its system operator was held liable for contributory infringement for both the uploading and the subsequent downloading of copies of Sega's video games by users.<sup>618</sup> The court decision was supported by the facts that the operators had knowledge that the infringing activity was going on through the bulletin board and had specifically solicited the uploading of the games for downloading by users of the bulletin board.<sup>619</sup> The defendant sold video game copiers through his bulletin board service (BBS), which enabled subscribers to the BBS to play games, which had been downloaded, from the BBS.<sup>620</sup> The court cited the Ninth Circuit's decision in *Fonovisa, Inc v Cherry Auction, Inc.*<sup>621</sup> for the proposition that providing the site and facilities for known infringing activity is sufficient to establish contributory liability.<sup>622</sup> However, it is stated that the result might be different if the operator of the bulletin board service (Maphia) did not encourage the uploading and downloading of copyrighted material by subscribers, or review or edit such material.<sup>623</sup>

(a)(iv) *Sega Enterprises Ltd v Sabella*

Similarly, in *Sega Enterprises Ltd v Sabella*,<sup>624</sup> the court refused to hold a bulletin board operator (Sabella) liable for direct infringement where there was

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<sup>618</sup> *Sega Enterprises Ltd. v Maphia*, 948 F. Supp. 932, 41 U.S.P.Q.2d (BNA) 1712 (N.D. Cal. 1996).

<sup>619</sup> *Sega Enterprises Ltd. v Maphia*, 948 F. Supp. 932-33, 41 U.S.P.Q.2d (BNA) 1712-13 (N.D. Cal. 1996), arguing that "even if Defendants do not know exactly when games will be uploaded to or downloaded from the MAPHIA bulletin board, their role in the copying, including the provision of facilities, direction, knowledge and encouragement, amounts to contributory copyright infringement".

<sup>620</sup> *Sega Enterprises Ltd. v Maphia*, 948 F. Supp. 941, 41 U.S.P.Q.2d (BNA) 1721 (N.D. Cal. 1996).

<sup>621</sup> 76 F.3d 259, 37 U.S.P.Q.2d (BNA) 1590 (9th Cir. 1996).

<sup>622</sup> *Sega Enterprises Ltd. v Maphia*, 948 F. Supp. 933, 41 U.S.P.Q.2d (BNA) 1713 (N.D. Cal. 1996). See also Dean, *Handbook of South African Copyright Law*, p. 1-50, with reference to *Atari, Inc & another v JB Radio Parts (Pty) Ltd*, Case No 17419/83, where the defendant sold a device which had as its primary function the making of reproductions of the applicant's computer games which were the subject of copyright. With respect to contributory infringement, the court stated that the defendant was instigating of facilitating the making of unauthorised copies of the applicant's computer games by third parties and therefore held him liable for the infringement of the applicable copyright even though there was no evidence on any actual reproduction of the applicant's game.

<sup>623</sup> McCabe, *Internet Copyright Infringement*, p. 5.

<sup>624</sup> *Sega Enterprises Ltd. v Sabella* 1997 Copyright L. Dec. (CCH) P 27, 648 (N.D. Cal. Dec. 18, 1996).

no evidence that the operator did any unauthorised copying herself. Subscribers of the bulletin board service of the defendant were uploading and downloading copies of Sega's video games. The defendant sold copiers that enabled users to play Sega games directly from floppy disks. Citing *Netcom*, the court concluded that "whether Sabella knew her BBS users were infringing on Sega's copyright or encouraged them to do so, has no bearing on whether Sabella directly caused the copying to occur."<sup>625</sup> The court did rule, however, that Sabella was liable for contributory infringement. The court argued that "providing the site and facilities for known infringing activity is sufficient to establish contributory liability."<sup>626</sup> Sabella provided the BBS as a central depository site for the unauthorised copies of games, and allowed subsequent distribution of the games by user downloads. He provided the facilities for copying the games by providing, monitoring, and operating the BBS software, hardware, and phone lines necessary for the users to upload and download games.

(a)(v) *Playboy Enterprises, Inc v Hardenburgh*

In *Playboy Enterprises, Inc v Hardenburgh*,<sup>627</sup> the defendants operated a bulletin board service (BBS) which made available graphic image files to subscribers for a fee, many of which contained adult material. Subscribers were given "credit" for each megabyte of electronic data they uploaded onto the system, which entitled them to download defined amounts of data from the system in return. Information uploaded onto the BBS went directly to an "upload file" where an employee of the BBS briefly checked the new files to ascertain whether they were not pornographic and not apparently protected by copyright. However, many of the plaintiff's copyrighted photographs appeared on the BBS and the plaintiff brought suit for infringement. The court found that the facts of the case, unlike those of *Frena*, *Maphia*, and *Netcom*, were sufficient to establish direct liability for infringement of both the public

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<sup>625</sup> *Sega Enterprises Ltd. v Sabella* at 29,848.

<sup>626</sup> *Sega Enterprises Ltd. v Sabella* at 29,848.

<sup>627</sup> 982 F.Supp. 503 (N.D. Ohio 1997).

display and distribution right. The court based its conclusion on two facts: (1) Defendants policy of encouraging subscribers to upload files, including adult photographs, onto the system, and (2) Defendants policy of using a screening procedure in which its employees viewed all files in the upload file and moved them into the generally available files for subscribers.<sup>628</sup> Arguing that these two facts transform the defendants from passive providers of a space in which infringing activities happened to occur to active participants in the process of copyright infringement.

(a)(vi) The Digital Millennium Copyright Act

The Digital Millennium Copyright Act<sup>629</sup> limit the liability of online providers for five general categories of activity: the conduit function, server caching, storing stationary material on a provider's server, location tools and good faith "take downs" of allegedly infringing material. The limitations of liability in the Bill would apply if the provider is found to be liable under existing U.S. principles of law. Whether a online provider qualifies or fails to qualify for the limitations is a separate question from whether a service provider is an infringer. Service providers who qualify are protected from all monetary relief for direct, vicarious and contributory infringement.

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<sup>628</sup> See also Cahoy, *New legislation regarding on-line service provider liability for copyright infringement*, p. 9.

<sup>629</sup> McCabe, *Internet Copyright Infringement*, p. 7. Furthermore in September of 1997, Senator Ashcroft of Missouri introduced in the Senate a bill containing comprehensive modifications to the Copyright Act known as the Digital Copyright Clarification and Technology Education Act of 1997. Section 512 of the bill deals specifically with online liability limitations. Significantly, the measure precludes direct, contributory or vicarious liability for persons who provide network services and facilities. To qualify, a person must (1) be providing such services or facilities for the purpose of, essentially, transmitting information or (2) not generate or alter the content of the transmission. (The OSP liability provision of this Act is limited in one major respect: it applies only to infringement arising out of the act of providing network services or facilities and does not include the storage of files on their server).

## (b) European Community

The European Community recognises the need to develop clear rules that govern liability of online providers.<sup>630</sup> The Commission believes that online providers, who directly upload infringing material onto the Internet, should be liable for copyright infringement.<sup>631</sup> The Commission, however, is not settled on the scope of an online provider's liability when third parties upload or download infringing works.<sup>632</sup> It is discussed that legislation should require online providers to take steps to remove or block illegal files.<sup>633</sup> Finally, the Commission proposes self-regulation of online providers and encouraged legislation implementing the use of "hotlines" whereby members of the public may inform online providers of the presence of copyright infringements on an online service.<sup>634</sup>

## (c) South African Copyright Law

Thus far, South African courts have not addressed copyright infringement liability of online providers. Neither has there been a court decision in the United Kingdom. However, because U.K. law has specific provisions addressing electronic copying,<sup>635</sup> some U.K. legal practitioners speculated that a U.K. court, under the 1988 Act, might find an online provider liable for copyright infringement by either issuing unauthorised copies of the work to the public or by showing or playing the work in public.<sup>636</sup> Under South African

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<sup>630</sup> Commission of the European Communities, *Follow-Up to the Green Paper on Copyright and Related Rights in the Information Society*, COM(96) 586 Final at 29.

<sup>631</sup> Commission of the European Communities, *Follow-Up to the Green Paper on Copyright and Related Rights in the Information Society*, COM(96) 586 Final at 13.

<sup>632</sup> Commission of the European Communities, *Follow-Up to the Green Paper on Copyright and Related Rights in the Information Society*, COM(96) 586 Final at 13. The Commission recommends that lawmakers consider the question of online provider liability in light of the European Community's goal of maintaining a common market, COM (96) 586 Final at 24.

<sup>633</sup> Commission of the European Communities, *Follow-Up to the Green Paper on Copyright and Related Rights in the Information Society*, COM(96) 586 Final at 14.

<sup>634</sup> Commission of the European Communities, *Follow-Up to the Green Paper on Copyright and Related Rights in the Information Society*, COM(96) 586 Final at 13 and 25.

<sup>635</sup> Section 17(2) of the U.K. Copyright, Designs and Patents Act.

<sup>636</sup> Smith, *Internet Law and Regulation*, p. 30; Morano, *Legislating in the Face of New Technology: Copyright Laws for the Digital Age*, p. 1416.

Copyright law an online provider may be held liable for direct or indirect infringement. The choice between direct and indirect infringement is important, because it determines the standard of liability. The main problem in the issue of liability of online providers is the question of their participation in the infringing act. Under the Act any person who, without the licence of the owner, does or causes any other person to do in the Republic any act which the owner has the exclusive right to do or to authorise directly infringes a copyright.<sup>637</sup> Thus, to establish direct liability for infringement, one must look at whether the defendant participated in the act of infringement himself or herself.

### (c)(i) Examination

The *Netcom* case, for example, refused to hold an Internet service provider directly liable for automatic pass through of infringing messages posted to UseNET by a subscriber.<sup>638</sup> The subsequent *Maphia* case<sup>639</sup> and the *Sabella* case<sup>640</sup> extended the logic of Netcom, even though the operators encouraged the initial uploading, but argue that the operators had not participated in the user's acts of uploading or downloading themselves. If a user uploads or downloads copyrighted material, for example on a bulletin board, it is the user's uploading or downloading, not the operator's provision of a bulletin board, that is the direct or primary cause of the violation of the copyright. It is therefore argued, that only the uploading and downloading of copyrighted material will provide a basis for finding a direct violation.<sup>641</sup> The storage place is merely a tool by which the user infringes, much like the owner of a public copying machine used by third party to copy protected material.<sup>642</sup> The bulletin

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<sup>637</sup> Section 23(1) of the Act.

<sup>638</sup> *Religious Technology Center v Netcom On-Line Communication Services* 907 F.Supp. 1361, 37 U.S.P.Q.2d (BNA) 1545 (N.D. Cal. 1995).

<sup>639</sup> *Sega Enterprises Ltd v Maphia* 948 F. Supp. 923, 41 U.S.P.Q.2d (BNA) 1705 (N.D. Cal. 1996).

<sup>640</sup> *Sega Enterprises Ltd v Sabella* 1997 Copyright L. Dec. (CCH) P 27, 648 (N.D. Cal. Dec. 18, 1996).

<sup>641</sup> Morano, *Legislating in the Face of New Technology: Copyright Laws for the Digital Age*, p. 1412.

<sup>642</sup> So argued in *Mairobie-FL, Inc v National Association of Fire Equipment Distributors and Northwest Nexus Inc*, 1997 WL 709747 (N.D. Ill. Nov. 13, 1997) (noting that "an act of

board, for example, initially has no material on it at all. The provider of storage place does generally not engage in any of the unauthorised acts itself. Installing and maintaining software that automatically reproduces the postings is the minimum necessary to operate a working computer bulletin board.<sup>643</sup> Therefore most of the online providers or bulletin board operators will argue that providing access to a storage server can not be seen as an infringement of one of the copyright owners rights. Thus, there must be at least some form of direct involvement in the anticipated act that lead to infringement or in the infringing acts themselves, such as resale of the infringing material, to held an online provider or bulletin board operator direct liable. Knowledge of the infringing nature of an act performed is not a component of direct copyright infringement.

Because it is generally the actions of the users that subject the provider to potential liability, not the actions of the provider himself, an online provider could be liable for contributory infringement.<sup>644</sup> Under the Act, contributory infringement does not require an actual knowledge of the involvement of infringing articles or performances to be copyright infringement.<sup>645</sup> However, the application of this provision could lead to an extensive liability of online providers and bulletin board operators. Online providers have significant difficulties to meet the demands of the copyright owners in order to avoid liability for infringing material about which they are unaware or are technically unable to remove or block.<sup>646</sup> It is operationally impossible for online service providers to review the content of trillions of bits of data travel through

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designing or implementing a system that automatically and uniformly creates temporary copies of all data sent through it is not unlike that of the owner of a copying machine who lets the public make copies with it.")

<sup>643</sup> *Religious Technology Center v Netcom On-Line Communication Services* 907 F.Supp. 1368, 37 U.S.P.Q.2d (BNA) 1549 (N.D. Cal. 1995).

<sup>644</sup> Section 23(1) of the Act ("any person, ..., who, ..., ... causes any other person to do, in the Republic, any act which the owner has the exclusive rights to do or to authorize.")

<sup>645</sup> Dean, *Handbook of South African Copyright Law*, p. 1-43, stating that "this provision is frequently relied upon to join directors of companies in their personal capacities in infringement proceedings where the infringing act is committed by the company"; referring to *Bosal Afrika (Pty) Ltd v Grapnel (Pty) Ltd & another*, 1985 (4) SA 882 (C) at 893; see also Smith, *Copyright Companion*, p. 19.

<sup>646</sup> Cover, *The Emperor's Magic Suit: Proposed Legislation Will Tailor the Copyright Law to Fit the Internet*, p. 8.

computer networks each day and identify infringements on their systems.<sup>647</sup> Besides the enormous volume of transitory communications, the material is divided into individual data packets, often travel different routes to their destinations, and are sometimes encrypted and compressed.<sup>648</sup> Additionally, providers and operators do not know whether these material are copyrighted, whether they are owned by the uploader, and whether the uploader had the rights to such acts.<sup>649</sup> Because knowledge by the online provider of the infringing activity is not material to a determination of contributory infringement,<sup>650</sup> thus a contributory liability standard is manifestly unreasonable. A direct liability standard would unfairly subject online providers to liability for infringement that they could not prevent because the high volume of files moved through an online service makes it impossible for online providers to monitor infringement on a system.

Therefore providers argue that they should be liable for infringement only, if "they have actual knowledge that infringing material has been or is being transmitted to, or resides on, their systems, and the ability and authority to terminate such activity, or remove it from their systems in a reasonable time."<sup>651</sup> The lack of knowledge might be found reasonable either because of the lack of copyright notices on the copies, the copyright holder's failure to provide the necessary documentation to show that there is a likely infringement, or, as described above, the evident impossibility to monitor the

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<sup>647</sup> Lee, *Toward a More Balanced Online Copyright Policy*, p. 43; Morano, *Legislating in the Face of New Technology: Copyright laws for the Digital Age*, p. 141; Dreier, *Copyright Law and Digital Exploitation of Works*, p. 15; Needham & others, *A Review of Copyright and the Internet*, p. 197.

<sup>648</sup> Cover, *The Emperor's Magic Suit: Proposed Legislation Will Tailor the Copyright Law to Fit the Internet*, p. 8.

<sup>649</sup> Lee, *Toward a More Balanced Online Copyright Policy*, p. 43. However, a solution may be the above introduced header-based system which is a program developed to check if uploaded information is authorised and if an individual download is permitted; see DOI Foundation, *About the Digital Object Identifier*, at [http://www.doi.org/about\\_the\\_doi.html](http://www.doi.org/about_the_doi.html) (visited Dec, 1998).

<sup>650</sup> Dean, *Handbook of South African Copyright Law*, p. 1-43 ("even though he may be in perfectly good faith").

<sup>651</sup> Lee, *Toward a More Balanced Online Copyright Policy*, p. 43; In *Religious Technology Center v Netcom On-Line Communication Services* 907 F.Supp. 1361, 37 U.S.P.Q.2d (BNA) 1545 (N.D. Cal. 1995), the Netcom's expert testified that with an easy software modification Netcom could identify postings containing particular words or from particular individuals, and Netcom had acted to suspend subscribers accounts on over one thousand occasions.

extensive content of its server.<sup>652</sup> In the case of actual knowledge, the online provider should then take the necessary steps to remove the infringing material of his server. However, removing all the material that has been identified as infringing is usually not feasible because the material could have been transferred through other online providers whose networks are not controllable by the originating provider.<sup>653</sup>

Requiring online providers to monitor communications would furthermore raise significant concern among privacy-sensitive Internet users.<sup>654</sup> Even for material that is posted to an Internet server, the economics of providing such facilities, for example Web site hosting, do not permit to screen and identify infringing material posted by others. Online providers are somehow comparable to "landlords".<sup>655</sup> Although it is theoretically possible for a landlord to possess legal control by insisting on lease clauses that allow him to monitor and police the activities of her tenants, the lack of a business rationale for insisting on this kind of control and the practical difficulties in conducting monitoring of tenant activities make it impractical for landlords to exert much control over tenants. However, in *Religious Technology Center v NetCom*,<sup>656</sup> the court distinguished the facts of the case from the situation that exists in a landlord/tenant relationship. It found that Netcom not only leased space, but also served as an access provider that stored and transmitted the infringing material. Unlike a landlord the court stated, Netcom retains some control over the use of its system. However, generally, online service providers only provide means by which users can exchange all kind of data. They do not originate, manage, or review the content of the information, and they do not know what information or messages they are transmitting or distributing over

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<sup>652</sup> Smith, *Copyright Companion*, p. 23. The U.K. courts interpretation of the knowledge requirement maintains that knowledge includes a reasonable belief that the infringing activity has taken or will take place. Knowledge is present when a reasonable man's interpretation of known facts would result in more than a mere suspicion of infringement; see Morano, *Legislating in the Face of New Technology: Copyright Laws for the Digital Age*, p. 1394.

<sup>653</sup> Cover, *The Emperor's Magic Suit: Proposed Legislation Will Tailor the Copyright Law to Fit the Internet*, p. 8.

<sup>654</sup> McCabe, *Internet Copyright Infringement*, p. 1.

<sup>655</sup> Dobbins, *Computer Bulletin Board Liability*, p. 226; Cahoy, *New legislation regarding on-line service provider liability for copyright infringement*, p. 21.

<sup>656</sup> *Religious Technology Center v Netcom On-Line Communication Services* 907 F.Supp. 1367, 37 U.S.P.Q.2d (BNA) 1549 (N.D. Cal. 1995).

the net. Different from online service providers, bulletin board operators are more comparable to publishers. Publishers are expected to know what is in the works they publish. It is theoretically possible for a bulletin board operator to monitor what is on his bulletin board, although in the case of very large boards this also may be difficult.

The requirement of knowledge may also eliminate the liability on the part of an online service provider or bulletin board operator with respect to many instances of indirect or secondary infringement in which the online service provider or bulletin board operator is merely a passive information conduit and has no knowledge of the infringement.<sup>657</sup> Finding such a service liable would involve an unreasonably broad construction of the acts in section 23 of the Act. No purpose would be served by holding those liable who have no ability to control the information to which their subscribers have access, even though they might be in some sense helping to achieve the Internet's automatic "exploitation" of files. An online provider that merely functions as a piece of the Internet infrastructure should not be held to be the cause of the infringement. Such a conclusion could force service providers out of business and eventually close all access to the Internet.<sup>658</sup> The requirement to review all the information on their servers would at least cut off the flow of information and communications for millions of people.<sup>659</sup>

(c)(ii) Proposal for a solution

Sweeping protection of a work on the one side and freedom of action on the other side are the different positions between copyright owners and online providers. The online providers want to limit their liability for material generated by users and transmitted via computer, but copyright owners demand online providers to bear responsibility for their networks. An equal

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<sup>657</sup> Section 23(2) of the Act; Smith, *Copyright Companion*, p. 23.

<sup>658</sup> Cover, *The Emperor's Magic Suit: Proposed Legislation Will Tailor the Copyright Law to Fit the Internet*, p. 3; Morano, *Legislating in the Face of New Technology: Copyright laws for the Digital Age*, p. 1412 and 1423.

<sup>659</sup> Lee, *Toward a More Balanced Online Copyright Policy*, p. 44.

balance still has to be found.<sup>660</sup> The electronic environment in which online providers do business is a novel development in our history, and to some degree, it is not well understood. It is only natural, therefore, to enact pre-emptive legislation to protect the elements, which appear necessary for the functioning of the Internet.

Owing to the fact that the question of liability of online providers under South African copyright law must be decided on an individual basis, it should therefore be considered, if

- the transmission was initiated by another person and the storage and transmission are carried out without the knowledge of the provider through an automatic technological process, without any selection of the material by the provider, or
- an actual knowledge is proved that infringing material is stored on the server, or the provider should have known that the activities were infringing.<sup>661</sup>
- the provider initially placed unauthorised material online or encouraged infringing activity.
- Law prohibits the provider from accessing the material.
- the provider has the feasible ability to monitor or control the content of its service.
- the provider continues to store and/or transmit the unauthorised work from the time of having actual knowledge or the possibility of having knowledge.
- the provider does not generate, select, or alter the content of the material.

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<sup>660</sup> See also Lee, *Toward a More Balanced Online Copyright Policy*, p. 49, suggesting that policymakers should adopt a standard of liability for copyright infringement, based on the U.S. Supreme Court's decision in *Sony*, with reference to *Sony Corp of America v Universal City Studios, Inc*, 464 U.S. 417 (1984). In *Sony*, in the absence of actual knowledge of any involvement in infringing behaviour, the Supreme Court concluded that manufacturers of products that are otherwise "capable of commercially significant noninfringing uses" may not be contributory liable for copyright infringement (*Sony Corp of America v Universal City Studios, Inc*, 464 U.S. 417, 437 (1984)).

<sup>661</sup> The requirement of knowledge is the most important distinction between direct and indirect infringement. As stated above, direct infringement imposes a strict liability standard, and the

- the provider does not determine the recipients of the material.
- the provider does not receive a financial benefit directly attributable to a particular act of infringement.
- the provider does not sponsor, endorse or advertise the material.
- the performing of the act does not infringe because of an exception, such as private or domestic use.

Limitations on liability relating to material online could be regulated as follows:

An online provider or operator shall not be liable for

1. direct infringement, based solely on the intermediate storage and transmission of material over that provider's system or network, if
  - (a) another person initiated the transmission;
  - (b) the storage and transmission is carried out through an automatic technological process, without any selection of that material by the provider; and
  - (c) any copy made of the material is not retained longer than necessary for the purpose of carrying out that transmission;
- (2) indirect infringement, if monetary relief is based solely on conduct; or
- (3) indirect infringement, if monetary relief is based solely on transmitting or providing access to material over that provider's system or network, if the provider
  - (a) does not know and is not aware of information indicating that the material is infringing; and
  - (b) does not receive a financial benefit directly attributable to the infringing activity.

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defendant's knowledge or intent is immaterial to a finding of liability.

While online providers may be "innocent infringers", copyright owners are innocent victims, and if a choice must be made between whom should pay for acts of infringement, then the online providers should be the ones made to suffer, not the copyright owners. As in the case of producers of video cassette recorders, for example, the producers have to pay a certain share of money (i.e. royalty) to a collecting society, because their machines enable users to make copies of works which affects the interests of the copyright owner. The share of the producer's payment to the collecting societies therefore compensates the copyright owners. Generally, payments are made by all persons or entities that are somehow offering access to a work, or enable users to copy a work, such as the producers of photocopier machines, video cassettes, tape decks, but also the owners of a discotheque who are playing copyrighted music to their audience. As a buyer has to pay a certain price for a tape deck, or a guest has to pay entrance fees for theatre or discotheques, similarly on the Internet, subscribers pay network service providers for unregulated network access. Because network service providers receive monetary benefit from infringing activity of others, they should also bear the costs of liability. This situation, however, should not lead to a predominant liability of online providers, only because the Internet makes it difficult and sometimes impossible to locate the "true" infringer. The cost of litigation against individual infringers is high and sometimes exceeds the eventual recovery. Therefore it is easier for a copyright owner or his licensee to proceed against a more centralised contributory infringer, such as online service providers and bulletin board operators. However, this can not be described as a satisfying solution. An adequate balance between copyright owners and providers of the new technology has still to be found. From a technical point of view, efforts should be undertaken to achieve improved identification of infringing contents and improved prevention of infringements.

#### *(d)* Legal Development in Germany

With the Act on the Utilisation of Teleservices (Teledienstegesetz) Germany became the first European country which dealt with the liability issue in a

specific act.<sup>662</sup> The purpose of this Act is to establish uniform economic conditions for the various applications of electronic information and communication services. It entered into force on August 1, 1997. The Act provides regulations concerning responsibility as follows:<sup>663</sup>

- Providers shall be responsible in accordance with general laws for their own content, which they make available for use.
- Providers shall not be responsible for any third-party content which they make available for use unless they have knowledge of such content and are technically able and can reasonably be expected to block the use of such content.
- Providers shall not be responsible for any third-party content to which they only provide access. The automatic and temporary storage of third-party content due to user request shall be considered as providing access.
- The obligations in accordance with general laws to block the use of illegal content shall remain unaffected if the provider obtains knowledge of such content while complying with telecommunications secrecy under § 85 of the German Telecommunications Act (Telekommunikationsgesetz) and if blocking is technically feasible and can reasonably be expected.

Further regulation is provided by the Bonn Declaration signed by the Minister Conference "Use of the possibilities in connection with global information networks".<sup>664</sup> Paragraph 41 of the declaration states that "they (the ministers) recognise the need to make clear distinction between the responsibility of those who produce and place content in circulation and of that of intermediaries." Paragraph 42 says "..., intermediaries like network operators

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<sup>662</sup> The Act is available in English at: <http://www.iid.de/rahmen/iukdgc.html> (visited March 1999). See also, Maennel, *Germany Enacts Sweeping Internet/Multimedia Law*, pp. 1 et seq., at <http://www.ipww.com/nov97/p3germany.html> (last visited May 1999). See also the German CompuServe judgement at <http://www.digital-law.net/artikel5/artikel/urteil.html>, whereas an Internet service provider was held liable for providing local dial-up access to CompuServe USA's facilities (proprietary content and access to Internet services) for the latter's German subscribers.

<sup>663</sup> Section 5 of the Act of the Utilisation of Teleservices.

<sup>664</sup> <http://www2.echo.lulbonn/conference.html> (last visited March 1999).

and access providers should, in general, not be responsible for content. ... Due account should be taken of whether such intermediaries had reasonable grounds to know and reasonable possibility to control."

#### **4.3.3.3 Interim Conclusion**

The liability of online providers for copyright infringement by third parties is a critical issue, which must be appropriately addressed if the phenomenon that is the Internet is expected to continue. Legislators must find the optimum point of balance between the incentive to create and the dissemination of material on the Internet. Lawmakers may do so by limiting the application of the direct infringement standard and instead promote theories of contributory and vicarious liability of online providers. A fair balance must not only be found between copyright users and online providers, but also within online providers themselves, such as content and service providers. Legislators should be loath to alter that balance without showing a defect in the law or the judicial reasoning that has created that law. Basically, an online provider who engages in network-type operations will face indirect or secondary liability only if a plaintiff can demonstrate that the online provider had knowledge of the infringing acts. Liability for direct or primary infringement in either case will not attach. An online provider providing other services, such as operating a bulletin board system, may face greater liability. Furthermore, in the United States, it was held that if an online provider clearly benefits financially from the infringement, the online provider may face liability for vicariously infringing a plaintiff's copyright. Also, if the online provider actively participates in the infringement as opposed to simply maintaining the system, it can be liable as a direct infringer.

## Chapter 5

### 5 Copyright law in an International Net

The Internet is a world-wide entity, and, as such, copyright infringement on this system is an international problem.<sup>665</sup> The scenario of global, simultaneous exploitation of works on the Internet conflicts sharply with the current system of international copyright protection, which is firmly based on national copyright laws with territorial effects. International Copyright underlies the principle of territoriality.<sup>666</sup> According to it, the national law of the country in which the protection is in question (*lex loci protectionis*) regulates the origin and scope of copyright.<sup>667</sup> This principle has been complemented by a national treatment obligation.<sup>668</sup> National treatment requires that national copyright laws protect works of foreign authors under the same standard as domestic author's work.<sup>669</sup> It also serves as a copyright choice of law norm because it ensures that the copyright law of the country in which infringing acts take place is always applicable, regardless of the copyrighted work's origin or the right holder's nationality.<sup>670</sup>

Regarding the principle of territory, the act of infringement normally has to be governed by the national law of the country where the infringement took place. In the case of cross-border distribution of offline media, e.g. CD-ROM,

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<sup>665</sup> Lee, *Toward a More Balanced Online Copyright Protection*, p. 48.

<sup>666</sup> This result relates to the principles of sovereignty of International law.

<sup>667</sup> For example article 5(2) of the Berne Convention provides that copyright protection "shall be governed exclusively by the laws of the country where protection is claimed.", or article 4(1) of the WPPT. Furthermore the so-called "national treatment principle" grant national copyrights to foreign copyright owners; see article 5(1),(2)(2) of the Berne Convention, article II of the UCC and article 3 of the TRIPS. See also *Reindl, Choosing Law in Cyberspace: Copyright Conflicts in on Global Networks*, p. 4.

<sup>668</sup> Dean, *Handbook of South African Copyright Law*, p. 1-91; see also Post, *Governing Cyberspace*, p. 159.

<sup>669</sup> This principle has been reinforced under article 3 of the TRIPS-agreement. Furthermore, under article 4 of the TRIPS-agreement, "any advantage, favour, privilege or immunity granted by a member to the nationals of any other country shall be accorded immediately and unconditionally to the nationals of all other Members."

<sup>670</sup> Geller, *International Copyright: An Introduction to International Copyright Law and Practice*, p. 106.

the laws of each country in which copies of the protected work are distributed are applicable.<sup>671</sup> Legally and economically cross-frontier distribution of offline media is not distinguished from distribution of traditional analogue copies of works, such as books or records. The legal scenario is less clear with regard to cross-frontier making available of protected works in digital networks. Instant and simultaneous world-wide access to and transmissions of copyrighted works over the Internet, however, is hardly compatible with the principle of territoriality. One of the main characteristics of digital exploitation of works is that the exploitation on the Internet and copyright infringement does not take place only in one single national territory, but in a global borderless network. The problem here is that on the Internet, transmissions of a work from one country may result in the reception of the work in many different countries, each one offering different levels of protection. Moreover, it is difficult to know where and when infringement might take place and to prevent such an action.<sup>672</sup>

## 5.1 The Internet as a Territory

The Internet is based on the connection of different digital networks. It can be described as a homogeneous electronic territory, already named as the so-called *Cyberspace*.<sup>673</sup> Legislation has not gone so far to recognise this "Cyberspace" as a new territory.<sup>674</sup> The character of the Internet, especially

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<sup>671</sup> Dreier, *Copyright Law and Digital Exploitation of Works*, pp. 22, 23.

<sup>672</sup> Lee, *Toward a More Balanced Online Copyright Protection*, p. 49; Dreier, *Copyright Law and Digital Exploitation of Works*, p. 3.

<sup>673</sup> The science fiction writer William Gibson in his 1984 novel "Neuromancer" introduced "Cyberspace" into the language.

<sup>674</sup> Different opinions, however, are debated. The most radical model would abolish any property rights in connection with digital networks, arguing that the free diffusion of information will become the predominant aspect of the digital era, see Barlow, *The Economy of Ideas*, p. 89. One further suggestion is that a legal regime modelled after the systems of an international *lex mercatoria* would be better able to solve international problems of copyright protection, Merges, *Intellectual Property and Digital Content: Notes on a Scorecard*, p. 15; see also Legal Advisory Board (LAB), Reply to the Green Paper on Copyright and Related Rights in the Information Society, at <http://www2.echo.lu/legal/en/ipr/reply/reply.html> (last visited June 1999). A *cyberspace lex mercatoria* would presumably replace national copyright laws to provide the legal rules for digital networks that, comparable to the *lex mercatoria*, would be independent from national legal systems, see Johnson&Post, *Law and Borders - The Rise of Law in Cyberspace*, p. 1367. The latter suggestion is, however, not held applicable for cyberspace, see Reindl, *Choosing*

the world-wide access and transmission possibilities, lead to a new complex of problems with regard to applying copyright law. On an international level, using a work on the Internet will have effects in many territories and affect these conflicting interests there.

The universal availability of copyrighted works is part of the Internet. Works such as text, videos and recordings of musical performances can be posted anywhere in the world, retrieved from any database in a foreign country, or made available by Internet service providers or bulletin board operators to subscribers on a global scale. Acts that may infringe exclusive copyrights can instantaneously and simultaneously occur in several countries.<sup>675</sup> If, for example, an author has found out that his work is being exploited illegally via the Internet by a third party whose server is in a foreign country. Under which law has the act to be judged? How can he stop this activity and demand compensation for the damage he has suffered? To which court should he turn? May he rely on his national law? And, should he win the case, what should he do to enforce the judgement against the infringer whose server is in a foreign country?

Because of the international character of the Internet, infringement can take place in different countries. However, there are still many major differences in the levels of protection afforded by national legislation. A copyright owner therefore may hold a bundle of national copyrights, which could differ from each other. The first question to be answered is therefore, under which law has the act(s) of infringement(s) to be judged.

### **5.1.1 Maximum Protection Rules**

One suggestion is to provide protection through existing national copyright laws, accompanied by appropriate choice of law rules to protect copyrighted

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*Law in Cyberspace*, p. 9 and 10.

<sup>675</sup> Post, *Governing Cyberspace*, p. 166.

works on digital networks.<sup>676</sup> The most protective copyright law should govern an infringing act implicating several copyright laws.<sup>677</sup> A conflict between two potentially applicable copyright laws therefore would always be resolved in favour of the copyright law that provides the higher level of protection. If, for example, a work is offered on a Web site in South Africa, but is not longer protected under the Act and the work was created and first published in England and is still protected under the U.K. Copyright, Designs and Patent Act and furthermore protected only with respect to moral rights under French law: then the copyright owner would be able to rely on English copyright law to obtain injunctive relief with world-wide effects. Eventually, the copyright owner could block exploitation in England and restrict exploitation in France even though he has to accept unrestricted exploitation in South Africa. This proposal purports to provide simple rules and also fully respects the national treatment principle.

This proposal has been criticised, because it is in question whether governing principles of international copyright law support the policy underlying this proposal.<sup>678</sup> First, it is argued that international copyright accept that countries have a right to determine exceptions from exclusive rights which may lead to a different scope of copyright protection.<sup>679</sup> Second, it is argued that this proposal would not cover all countries because applying international copyright is still limited to its member countries.<sup>680</sup> Third, it is argued, that the result of a multiplicity of applicable laws will only complicate matters, not only because it enables the plaintiff to "opt" for the most protective law, but also because it requires carefully "tailored" permanent remedies that take into

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<sup>676</sup> Geller, *International Copyright: An Introduction to International Copyright Law and Practice*, p. 106.

<sup>677</sup> Geller, *International Copyright: An Introduction to International Copyright Law and Practice*, p. 106.

<sup>678</sup> Reindl, *Choosing Law in Cyberspace*, p. 15.

<sup>679</sup> See for example article 10 of the WIPO Copyright Treaty (WCT) and article 16 of the WIPO Performances and Phonograms Treaty. Article 10 of the WCT reads as follows: "Contracting Parties may, in their national legislation, provide for limitations of or exceptions to the rights granted to authors of literary and artistic works under this Treaty in certain special cases that do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the author." The right to determine exceptions can lead to a different scope of copyright protection, if, for example, a country is favouring consumer interests and public interests and another country is favouring the interests of the right holder.

account all countries in which continued use of works on digital network infringes the plaintiff's copyright.<sup>681</sup> And finally, the proposal has been held incomplete, because it does not provide a substitute choice of law rule that applies if two connecting factors do not coincide.<sup>682</sup> This criticism is justified and points out the individual problems regarding the application of choice of law rules. A further examination is therefore necessary.

### 5.1.2 Satellite Broadcast and Choice of Law Analysis

The erosion of territoriality notions is not a new phenomena in international copyright. To some extent, the difficulties arising from the exploitation of copyrighted works on the Internet resemble the situation created by the commercial application of radio or satellite broadcasting,<sup>683</sup> which for the first time has made the exploitation of copyrighted works multinational.<sup>684</sup> Satellite technology required new, more flexible, choice of law rules to replace strict territoriality-based concepts. Even though radio or satellite broadcasting does not provide a perfect analogy to the Internet,<sup>685</sup> it does raise many issues that are relevant for the discussion of jurisdiction on the Internet. Although the responsible Minister in South Africa is empowered to make the provisions of the Act applicable to broadcasts and programme-carrying signals emanating from other countries, he has not to date given effect to his powers in any these regards.<sup>686</sup>

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<sup>680</sup> Reindl, *Choosing Law in Cyberspace*, p. 15.

<sup>681</sup> Reindl, *Choosing Law in Cyberspace*, p. 16.

<sup>682</sup> Reindl, *Choosing Law in Cyberspace*, p. 18.

<sup>683</sup> Under the Act copyright can arise where a broadcast is made in the Republic or a programme-carrying signal is emitted to a satellite from a place in the Republic, see section 4(b) and (c) of the Act.

<sup>684</sup> Geller, *International Copyright: An Introduction to International Copyright Law and Practice*, p. 52.

<sup>685</sup> A broadcaster's control of transmitted signals is limited, but at least the countries within a satellite's "footprint" are determinable. On the Internet, however, it may be impossible to anticipate where users that access a work are located. Satellite broadcasting, moreover, is a unidirectional communication that originates from a clearly identifiable source. The Internet, in contrary, allows interactive communication between transmitters and receivers which the receiver may initiate.

<sup>686</sup> Dean, *Handbook of South African Copyright Law*, p. 1-89.

For the determination of the applicable law on the Internet, the further examination will therefore turn to the conflicts debate related to radio and satellite broadcasting. The different opinions in the dispute of applicable law regarding broadcast distinguish between an "emission theory" and a "reception theory" (or so-called "communication theory").<sup>687</sup>

### **5.1.2.1 Emission Theory**

The emission theory is based on the European Community's Directive for Satellite Broadcasting to allow free movement of television programming throughout the European Community.<sup>688</sup> The directive require Member States to apply only the copyright law of the country from where the satellite broadcast is transmitted to the satellite ("territory of broadcast").<sup>689</sup> This requirement eliminates the confusion created by the application of various national laws to one broadcast. A choice among several countries copyright laws therefore no longer exists as the signals are transmitted only from one country. This regulation favours a more efficient exploitation and the uniformity of the applicable law because it allows the parties to settle all aspects of right acquisition under one national copyright law.<sup>690</sup> However, this concern depends on the uniformity of underlying substantive copyright laws and as long as world-wide levels of protection differ significantly, this regulation is not attractive for digital networks.

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<sup>687</sup> It is named "communication theory" on the ground that it is focussed not only on the act of transmission but on the entire communication - from the source to the viewers - as the relevant act that falls under the right holder's exclusive copyright, see Geller, *Choosing Law in Cyberspace*, p. 19.

<sup>688</sup> Council Directive 93/83/EEC. Based on a modified emission theory, see also Ginsburg, *Copyright without borders? Choice of Forum and Choice of Law for Copyright Infringement in Cyberspace*, p 168; see also Dreier, *Copyright Law and Digital Exploitation of Works*, p. 23; see also *Playboy Enterprises, Inc. v Chuckleberry Publishing, Inc.*, 939 F.Supp.1032, 1039-1040 (S.D.N.Y. 1996)(United States).

<sup>689</sup> Under the definition in Article 1(II) of the Directive of Satellite Broadcast, the Act of communication occurs only in the Member State where the signals are introduced into the chain of communication, in other words, the relevant act occurs only in the country from where the signals are sent to the satellite without further modification.

<sup>690</sup> Broadcasters, for example, will no longer have to negotiate for copyright royalties in every Member State receiving the broadcast.

A provider of content on the Internet could then be comparable with the provider of satellite television. It would allow the provider, in order to avoid copyright restrictions, to locate him and his activities in countries with low level of copyright protection and enforcement.<sup>691</sup> Especially if he offers the content in a territory, which does not guarantee copyright protection at all. The defendant could then globally exploit works and yet remain outside the reach of any other country's copyright law. This was taken into situation and therefore, according to article 1(2) of the Directive of Satellite Broadcasting, the law applicable to satellite broadcast depends on the level of protection in the country of origin. Member states may continue to apply their domestic copyright law to broadcasts from third countries where the level of protection does not reach the Directive's standards of protection. In this case the determination of the law that ultimately governs the satellite broadcasts depends on a case specific interest analysis.

A problem might be seen in the reference to the technical origin of infringing acts to determine the applicable law. The Internet is built on a decentralised structure of digital networks, which make it impossible to determine the location of a server from which a work is made available to the public. If works are made publicly available on the Internet, the provider of these works no longer focuses on a specific audience, but makes works accessible for the global, general public. The provider no longer actively controls the place of reception that can potentially occur almost everywhere in the world. A broadcaster at least knows in advance in which territories its transmissions will be receivable. For example if a work is posted on a bulletin board, it may be impossible for the provider of the bulletin board service to predict the range of "reception".

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<sup>691</sup> Schurtz-Taylor, *The Internet Experience and Author's Rights*, p. 130.

### **5.1.2.2 Reception Theory**

Under the Reception theory a crossborder transmission was held to implicate the copyright laws of the countries where the program audience was located, and the broadcaster was therefore required to acquire rights for those jurisdictions.<sup>692</sup> As a result, the provider of content would therefore have to consider all existing copyright laws in the world, because his content is available for users around the globe. The most stringent Copyright law would then determine the legal acting of each provider, if he does not want to infringe a copyright.

Some U.S. courts have avoided the consequence of a multiplicity of applicable laws. They have found U.S. copyright law to be applicable to the entirety of a multinational infringement claim as long as an initial act of reproduction occurred within the United States.<sup>693</sup> This opinion appears questionable, because it does not consider the interests of one of the foreign countries involved. For example in *Playboy Enterprises, Inc v Chuckleberry Publishing, Inc*<sup>694</sup> the defendant created a Web site in Italy using a "Playmen" mark similar with Playboy's established trade mark and offered images for downloading. Playboy Enterprises filed suit in the United States and the court assumed jurisdiction. The court ruled that uploading copyrighted pictorial images onto a computer in Italy, which could be accessed by users in the United States, constituted a public distribution in the United States. A court in Minnesota/United States already found that the accessibility of a South American Web site in the State of Minnesota/United States was sufficient to found personal jurisdiction.<sup>695</sup> In contrast, a court in New York found that a Web site owner had not rendered himself to the jurisdiction of New York

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<sup>692</sup> See Oberster Gerichtshof (OGH)(Supreme Court) 44 Ob 19/91 (Germany) and *CAPAC v International Good Music, Inc* (1963) S.C.R. 136 (Canada); see also Dreier, *Copyright Law and Digital Exploitation of Works*, p. 23.

<sup>693</sup> See *Playboy Enterprises, Inc v Chuckleberry Publishing, Inc*, 939 F.Supp.1032, 1039-1040 (S.D.N.Y. 1996); *Update Art, Inc v Modiiin Publ'g, Ltd.*, 843 F.2d 67 (2d Cir. 1988); *Curb v MCA Records, Inc.*, 898 F. Supp. 586 (M.D. Tenn. 1995).

<sup>694</sup> *Playboy Enterprises, Inc. v Chuckleberry Publishing, Inc.*, 939 F.Supp.1032, 1039-1040 (S.D.N.Y. 1996); see also Werksmans Attorneys, *Jurisdiction in cyberspace*, p. 1.

<sup>695</sup> *Minnesota v Granite Gate Resorts, Inc.*, see Werksmans Attorneys, *Jurisdiction in cyberspace*, p. 2.

merely because New York users had accessed the site.<sup>696</sup> However, a cumulative application of the laws of the country of origin and of the countries of reception would ensure a broader protection of authors and right holders because they are able to control the acquisition of rights for each territory in which an act of exploitation infringes a copyright.

### 5.1.3 Jurisdiction in South Africa

South Africa's copyright law is "influenced by, and is part of, an international network of copyright protection which is aimed at a reasonable degree of standardisation of forms and levels of protection and the granting of protection to foreign works on a reciprocal basis."<sup>697</sup> In general, copyright can arise where an original work of a type recognised by the Act is created by an author who is suitably qualified person, whether alone or with another, or, where copyright is not covered in this manner, where a broadcast is made in the Republic, a programme-carrying signal is emitted to a satellite from a place in the Republic, a cinematograph film or computer program is first published or made in the Republic.<sup>698</sup>

Copyright created in South Africa extends to a large number of foreign countries. The Act provides that the Minister of Economic Affairs and Technology can, by notice in the *Government Gazette*, provide that any provision of the Copyright Act that is specified in the notice shall in the case of any country so specified apply:

- (i) in relation to literary, musical or artistic works, computer programs, cinematograph films, sound recordings and published editions first published in that country as it applies in relation to literary, musical or

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<sup>696</sup> *Bensuan Restaurant Corp. v Richard King*, see Werksmans Attorneys, *Jurisdiction in cyberspace*, p. 2.

<sup>697</sup> Dean, *Handbook of South African Copyright Law*, p. 1-88. With respect to copyright law, South Africa is a signer of the Berne Convention and the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS Agreement).

<sup>698</sup> Section 3 of the Act.

artistic works, computer programs, cinematograph films, sound recordings and published editions first published in the Republic;

- (ii) in relation to persons who at a material time are citizens or subjects of that country as it applies in relation to persons who at such a time are South African citizens;
- (iii) in relation to persons who at a material time are domiciled or resident in that country as it applies in relation to persons who at such a time are domiciled or resident in the Republic;
- (iv) in relation to bodies incorporated under the laws of that country as it applies in relation to bodies incorporated under the laws of the Republic;
- (v) in relation to broadcasts made and programme-carrying signals emitted to a satellite from places in that country as it applies in relation to broadcasts made and programme-carrying signals emitted to a satellite from a place in the Republic.<sup>699</sup>

The notice shall be issued to any countries which is not a party to a convention relating to copyright to which the Republic is also a party and may only apply these provisions to countries that afford reciprocal rights.<sup>700</sup> The provisions may be restricted so that they are subject to exceptions or modifications and may be made to apply generally or in relation to classes of works or classes of cases specified in the Act.<sup>701</sup>

Copyright owners of these countries are then treated in the same way as South African citizens or bodies incorporated in South Africa if the provisions are not restricted.<sup>702</sup> In addition, broadcasts and programme-carrying signals made or emitted to a satellite from a place in the country concerned are

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<sup>699</sup> Section 37(1)(a)-(e) of the Act.

<sup>700</sup> Section 37(3) of the Act. A list of the Berne Convention can be found in Smith, *Copyright Companion*, p. 185 and 186.

<sup>701</sup> Section 37(2)(a) and (b) of the Act.

<sup>702</sup> Smith, *Copyright Companion*, p. 6.

treated in the same way as those made or emitted from a place in the Republic. In respect of other works first published in any such country, the provisions apply in the same way as if the works had been first published in the Republic.

#### 5.1.4 Proposal for a Solution

Uniform standards of copyright protection are a highly desirable response to a technology that ignores territorial boundaries.<sup>703</sup> If national copyright laws provide essentially the same level of protection, the need to localise acts of use exactly and determine the applicable law is much diminished. The most important issue would then become finding the country that provides the most effective means of enforcement. Yet a standardised international copyright law, however, does not exist, and will not exist in the near future.<sup>704</sup> The existing international copyright law will not harmonise national copyright laws comprehensively enough to render choice of law analysis obsolete.<sup>705</sup> Generally speaking, the legal protection of advanced technology has caused considerable disagreement between industrialised and developing countries from the 1960s onwards. The individual development of each national law has created different opinions and ideas. With regard to the different economical interests, differences can be found, for example, in the duration of protection, the different scope of exceptions from exclusive rights, the scope of protection and in compulsory licensing.<sup>706</sup> Nowadays it is, for example, the

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<sup>703</sup> The international community already took important steps toward greater harmonisation of national copyright laws by adopting the TRIPS Agreement and the two WIPO treaties, as discussed above. See also Fujita, *The Great Internet Panic: How Digitization is Deforming Copyright Law*, p. 9. Governments are considering the prospect of reaching international accord on the protection of intellectual property, see Commission of the European Communities, *Follow-Up to the Green Paper on Copyright and Related Rights in the Information Society*, COM(96) 586 Final at 29-31 (stating that United States, European Community, Japan, Canada and Australia are examining international harmonisation of copyright legislation regarding new technology). See also Post, *Governing Cyberspace*, p. 160.

<sup>704</sup> Dreier, *Copyright Law and Digital Exploitation of Works*, p. 4.

<sup>705</sup> Post, *Governing Cyberspace*, p. 161.

<sup>706</sup> Reindl, *Choosing Law in Cyberspace*, p. 13; Wijk, *Intellectual Property*, p. 30 and 31. A programmer, for example, could be considered as the author of the Web site under European law, whereas under a different law it could be the employer. Furthermore the duration of copyright law protection in the European countries have moved toward seventy-year post mortem auctoris

characterisation of transmissions of copyrighted works over digital networks. Besides these differences in national laws, the fact is to be seen, that not every country on the globe signed one of the international contracts, treaties or agreements regarding copyright protection. Thus, these countries are not granting any protection. This makes a global jurisdiction and enforcement of copyright infringement impossible to this day. And as long as an international consensus between the different ideas of each national copyright is not foreseen, it seems to be unlikely to come to an agreement on what would be the most protective copyright. Besides the development of an individual "cyberlaw" is not a credible alternative.

At present the answer may lie in a multiple solution. If a digitised work is used on the Internet, the acts of infringement have to be located in its "Cyberspace territory" and assigned to the "real territory" of a country and its legislation.<sup>707</sup> Three locations to determine the applicable copyright law are conceivable: The location of the unauthorised user, the location of infringement or the location of the copyright owner. In light of the need to balance the interest of each law, provided that these locations are in different territories with divergent protection, a set of flexible choice of law rules is advisable:

- if the unauthorised user and the copyright owner are both domiciled in the same country, then the law of that country will apply.
- if not, the law of the country in which the act of infringement took place; if however the act of infringement produced its effects in another country, then the law of the second country will apply.

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(pma) protection, whereas international treaties require only a fifty year pma protection period, as is in South Africa; see section 3(2), (3) and (4) of the Act. See also Smith, *Copyright Companion*, p. 17.

<sup>707</sup> The challenge for the conflicts scholar in this situation is to define at what points the virtual world of digital networks and real world of copyright laws and persons exploiting and consuming copyrighted products are reasonably connected to justify the application of a specific national copyright law. The rights and liabilities of the parties with respect to an issue in tort, for example, are determined by the local law of the state which, with respect to that issue, has the most significant relationship to the occurrence and the parties which is determined by considering (a) the place where the injury occurred, (b) the place where the conduct causing the injury occurred, (c) the domicile, residence, nationality, place of incorporation and place of business of the parties, and (d) the place where the relationship, if any, between the parties is centred, see also Post,

If, for example, a work of an author is reproduced without his authorisation in one country and then distributed and further reproduced in another country, and then sold to several other countries, the copyright law of the first country would govern the reproduction of the work, and the copyright laws of each other country would determine whether the imports, sales and publication, besides the further reproductions, were lawful. The law applicable to moral rights would be left to the choice of the injured party as follows:

- The law of the country in which the copyright owner is domiciled or usually resident.
- The law of the country where the unauthorised user is domiciled or usually resident.
- The law of the country in which the infringement took place.

Forms of use on the Internet differ so widely that a single, simple conflict rule is unlikely to fit all cases. Although it may be justified to apply only one copyright to an act of exploitation in certain cases, choice of law rules that apply several copyright laws in appropriate circumstances may also be necessary in the Internet context.<sup>708</sup> In any case, copyright owners who are interested in enforcing their copyrights online should establish procedures for identifying infringements of their works online.

## 5.2 Enforcement of Rights in Foreign Countries

Even in the case that a national court has jurisdiction under the applicable national procedural law, in many cases this court will not render a judgement on the entire cross-border case but only on the relevant national part thereof. Where the infringer is neither domiciled nor has his place of business or

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*Governing Cyberspace*, p. 162.

<sup>708</sup> For other proposed regimes for copyright protection, see Benjamin R. Kuhn, *A Dilemma in Cyberspace and Beyond: Copyright Law for Intellectual Property Distributed over the Information Superhighways of Today and Tomorrow*, 10 *Temp. Int'l & Comp. L.J.* 172, 207-209 (1996); see also Barbara Cohen, *Proposed Regime for Copyright Protection on the Internet*, 22 *Brook. L. Rev.* 401, 431-35 (1996).

property within national territory, the rights holder has no choice but to enforce a judgement obtained within national territory in a foreign country. There are proceedings for recognition of foreign judgements, but they are sometimes long-winded and uneconomic.<sup>709</sup> In practice it is frequently simpler and faster to obtain a foreign judgement directly. Article 14(2) of the WIPO Copyright Treaty provides a provision on enforcement of rights. It states that contracting parties shall ensure that enforcement procedures are available under their law so as to permit effective action against any act of infringement of rights covered by the WCT, including expeditious remedies to prevent infringements and remedies which constitute a deterrent to further infringements.<sup>710</sup>

Already an unsuccessful effort to prevent others from posting own material protected by copyright on their Web sites took place in context with the *Nottinghamshire* case.<sup>711</sup> Nottinghamshire County Council (NNC), the owner of the copyright in the report, obtained a High Court order to force three local journalists to remove a report of the NNC from their Web site. However, in the meantime, over twenty sites around the world were set up carrying copies of the report, among them, Professor Peter Junger of Case Western Reserve University Law School, Cleveland, Ohio. Professor Junger argued that because the Web site is located in the US, the NNC does not have the *locus standi* to sue in the US courts. In addition, if the NNC were to seek an injunction from a US court, Professor Junger commented that he would claim "fair use" as a defence and would also claim protection under the US Constitution. Finally the NNC dropped the case. The injunction was lifted by consent at the beginning of September 1997.

This unsuccessful result for the Copyright owner points out that copyright owners have no quick and effective legal remedies to prevent infringement of their rights in other countries. With respect to digital networks, choice of law

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<sup>709</sup> For example the European Convention on Jurisdiction and Enforcement of Judgements and the Lugano Convention.

<sup>710</sup> Article 14(2) of the WIPO Copyright Treaty contains the same provisions as article 41(1) of the TRIPS-Agreement.

<sup>711</sup> *Nottinghamshire County Council v Gwatkin and others*, 3rd June 1997. The order obtained by the council is available at <http://www.users.globalnet.co.uk/~dlheb/legal1.htm> (last visited 06/1999).

rules should arguably give substantial weight to the enforcement interests of right holders because copyrighted works are so vulnerable to unauthorised exploitation and because so much uncertainty surrounds the reach of exclusive rights.

## **6 Conclusion**

Copyright law will undoubtedly provide one of the most important forms of intellectual property protection on the Internet. Considerable challenges will be presented, however, in adapting traditional copyright law, which was designed to deal with the creation, distribution and sale of protected works in tangible copies, to the electronic transmissions of the online world in which copies are not tangible in the traditional sense, and it is often difficult to know precisely where a copy resides at any given time within the network.

Generally, on the one side, the South African copyright law provides a good basis to reach reasonable results, on the other side, there are still many aspects why even intellectual property law is not completely satisfactory when applied to issues concerning the Internet. The most difficult aspect of adapting copyright law to the online world stems from the fact that virtually every activity on the Internet, such as browsing, caching, linking, downloading, accessing information, and operation of an online service, involves the making of copies, provided that copyright law treats data stored in the RAM as copies for purposes of copyright law. If the law were to treat all forms of copying as infringements of the copyright holder's rights, then the copyright holder would have very strong control over the use of the copyrighted work on the Internet. Which forms of copying the law should deem to be within the control of the copyright owner and which should not presents a very difficult challenge.

The cumulative effect of the copyright holder's rights being implicated by every use of a work on the Internet may be to give the copyright owner the equivalent of exclusive rights of "transmission and access" of information. However, the Copyright Act does not provide a separate right of transmission and access as provided in the two adopted WIPO treaties and explicitly recognised in the draft EC Directive.

Legislators need not prematurely revamp the system of copyright if traditional copyright concepts may properly ensure adequate protection of intellectual

property in the information age. Legislators may be open to ideas regarding the creation of new exclusive rights, such as a transmission right, or an exclusive right to control accesses, but at the same time, lawmakers must respect classic copyright principles that have endured for centuries. The Internet is not a development that requires a complete new "legal dress", sufficient seems to be that the law must only tailor copyright law to fit within online technology.

Apart from this, copyright law should be strengthened and not undermined, for defective or a total lack of copyright protection means that necessary investments cannot be regained and as a result will no longer be made. Yet without attractive products, the future development of the information society's infrastructure is at risk.

The global nature of the Internet may give rise to multiple territorial liability. If every intermediate copy made during a transmission is considered infringing, there is the possibility that a single transmission could give rise to potential liability in several countries, even countries in which the sender did not intend or contemplate that its actions would result in the creation of a copy. Moreover, differing standards could apply: the same intermediate copy created in the course of transmission through the Internet could be considered infringing when passing through one country, and not when passing through another.

In sum, copyright owners may have potentially unprecedented rights over use of their copyrighted material on the Internet. One can expect that the fair dealing clause and the implied licence (and their international equivalents) will take centre stage in resolving the balance between copyright owners and users rights on the Internet. How broadly these exemptions of protection will be applied, and whether they will be consistently applied in various countries, remains to be seen.

## **7 Bibliography**

- Barlow J P**, The Economy of Ideas; A Framework of Patents and Copyrights in the Digital Age (Everything You Know About Intellectual Property Is Wrong), *Wired*, March 1994, p. 84
- Beal K**, The Potential Liability of Linking on the Internet: An Examination of Possible Legal Solutions, 1998 *Brigham Young University Law Review*, pp. 703 et seq.
- Bechtold S**, Multimedia und das Urheberrecht (Multimedia and Copyright) at <http://www.jura.uni-tuebingen.de/~s-bes1/sem97> (visited Nov 1998)
- Birrell A**, *Law and History of Copyright in Books* (1899), Reprinted 1971, New York
- Bond N M**, Linking and Framing on the Internet: Liability under Trademark and Copyright Law, 1998 *DePaul University, DePaul Business Law Journal*, 11 *DePaul Bus. L.J.* 185
- Cahoy D R**, New Legislation regarding on-line service provider liability for copyright infringement: A solution in search of a problem?, *The Journal of Law and Technology* (1998), 38 *IDEA* 335
- Carr H, Arnold R**, *Computer Software: Legal Protection in the United Kingdom* (1992), second edition, London
- Cerf V**, A Brief History of the Internet and Related Networks, Internet Society (ISOC), at <http://www.isoc.org/internet-history/cerf> (visited Oct 1998)
- Copeling A J C**, Copyright, (revised by AJ Smith) in: Joubert, *The Law of South Africa* (1998), Volume 5 Part 2
- Cover K A**, The Emperor's Magic Suit: Proposed Legislation Will Tailor the Copyright Law to Fit the Internet, *CLRTJ* 1996/1997, at <http://www.smu.edu/~csr/win96a2.htm> (visited Mar 1999)
- Dean O H**, *Handbook of South African Copyright Law*, January 1997
- Dobbins D M**, Computer Bulletin Board Operator Liability for Users Infringing Acts, *Michigan Law Review*, p. 217 et seq., Vol. 94, No.1, October 1995
- Dreier T**, Copyright Law and Digital Exploitation of Works - The Current Copyright Landscape in the Age of the Internet and Multimedia, at <http://www.ipa-ue.org/dreier.htm> (visited Jan 1999)
- Dreier T**, Copyright on its way to the information society, *GRUR* 1997, p. 859-866

**Edwards L**, Defamation on the Internet, in Law & the Internet, Regulating Cyberspace, Oxford, 1997

**Effross W A**, Rights, Rules and Remedies for Unwelcomed Web-Linking, at <http://law.sc.edu/sclr/Effross.htm> (visited Jun 1999)

**Fujita A K**, The Great Internet Panic: How Digitisation is Deforming Copyright Law, 2 J.Tech. L. & Pol'y 1, at <http://journal.law.ufl.edu/-techlaw/2/fujita.html> (visited May 1999)

**Geller P E**, International Copyright: An Introduction to International Copyright Law and Practice, International Copyright Law & Practice, (MB) 3(1)(b)(i), 1997

**Garnett K, Mummery J, Rayner J J**, Copinger and Skone James on Copyright, Copyright Commentary, 13th edition, 1991, First Supplement, 1994

**Ginsburg J C**, Copyright without Borders? Choice of Forum and Choice of Law for Copyright Infringement in Cyberspace, 15 Cardozo Arts & Entertainment Law Journal 153, 169-73 (1997)

**Hayes D L**, Advanced Copyright Issues on the Internet, 1998 Texas Intellectual Property Journal, 7 Tex.Intell.Prop.L.J. 1

**Jakab P**, Facts and Law of Web Linking, December 1997 at the State Bar of Georgia's 12th Annual Computer Law Institute, at <http://www.computerbar.org/seminars/97jakob.htm> (visited May 1999)

**Johnson D R, Post D**, Law and Borders - The Rise of Law in Cyberspace, 48 Stanford Law Review (1997)

**Koch F A**, Rechte an Webseiten (translated as Rights on Web sites), NJW-CoR 5 (1997), p. 298-301

**Latman A, Gorman R, Ginsburg J**, Copyright for the Nineties, Cases and materials (1989), 3rd edition

**Lawrence G M, Lobsenz C B**, Software on the Internet Invites Piracy, April 13, 1998, The U.S. National Law Journal, B09

**Leiner B M, Cerf V, Clark D** and others, A Brief History of the Internet, Last revised 20 Feb 1998, at <http://www.isoc.org/internet-history/brief.html> (visited August 1998)

**Lee Y-C**, Toward a More Balanced Online Copyright Policy, March 1998, Communications and the Law, pp. 37 et seq.

**Lewinski S von**, The Proposal of the EU for a Directive for Copyright and Related rights in the Information Society, GRUR Int., p. 637-642 (1998)

- Lewinski S von**, Rental Right, Lending Right and Certain Neighbouring Rights: The EC Commission's Proposal for a Council Directive, 13 European Intellectual Property Revue, p. 117 et seq. (1991)
- Litman J**, The Exclusive Right to Read, 13 Cardozo Arts & Entertainment Law Journal 29
- Litsey C L**, Copyright and the Free Flow of Information
- MacQueen H**, Copyright and the Internet, in Law & the Internet - Regulating Cyberspace, Oxford (1997)
- McCabe M P, Halpert J J, Bernheim J**, Internet Copyright Infringement: Congress, Courts Address Liability of Third Parties, New York Law Journal, August 10, 1998, at <http://www.ljextra.com/internet/0810netcopy.html> (visited Feb 1999)
- Merges R**, Intellectual Property and Digital Content: Notes on a Scorecard, Cyberspace Lawyer, June 1996
- Microsoft**, Official Curriculum Internetworking and Intranetworking, Windows 95
- Morano M F**, Legislating in the Face of New Technology: Copyright Laws for the Digital Age, Fordham International Law Journal, Vol. 20, p. 1374-1426
- Needham B J, McThenia T, Amos F B, Douglas K W**, A Review of Copyright and the Internet 1998 The Campbell Law Review, 20 Campbell Law Review 193
- Nieves P A**, Hyperlinks, Frames and Meta-tags: An Intellectual Property Analysis, The Journal of Law and Technology, at <http://www.patentperfect.com/idea.htm> (visited Jun 1999)
- Nordemann W, Vinck K, Hertin, P, Meyer, G**, International Copyright and Neighbouring Rights Law, Commentary with special emphasis on the European Community (1990), Weinheim
- Olswang S**, Accessright: An Evolutionary Path for Copyright into the Digital Era?, (1995) 5 European Intellectual Property Review, pp. 215 et seq.
- O'Rourke M A**, Legal Issues on the Internet: Hyperlinking and Framing, D-Lib Magazine, April 1998, at <http://www.dlib.org/dlib/april98/04orourke.html> (visited May 1999)
- Pearson H**, Information in a digital age - The challenge to copyright (1996), The Computer Law and Security report
- Pistorius T, Visser C**, the Copyright Amendment Act 125 of 1992 and Computer Programs: A Preliminary Overview (1992) 4 SA Mercantile LJ 346
- Post D G**, Symposium: Governing Cyberspace, 1996 The Wayne Law Review, 43 Wayne L. Rev 155

**Raysman R, Brown P**, Dangerous Liaisons: The Legal Risks of Linking Web Sites, New York Law Journal, April 8, 1997

**Rose T**, Unlawful Linking and Framing, December 1998, at <http://falcon.cc.ukans.edu/~trose/project1.html> (visited Jul 1999)

**Schurtz-Taylor J**, The Internet Experience and Authors Rights: An overview of some of the present and future problems in the digital information society, International Journal of legal information, 1996, Vol. 24, p. 113-136

**Schweighofer E**, Downloading, Information Filtering and Copyright, Information and Communications Technology Law, June Vol. 6, No. 2, 1997, pp. 121 et seq.

**Schwimmer M, Mende C S**, Madonna and Audio Streaming - Copyright Infringement on the Internet, New York Law Journal, March 9, 1998, at <http://www.nylj.com> (visited Jan 1999)

**Reindl A P**, Choosing Law in Cyberspace: Copyright Conflicts on Global Networks, Michigan Journal of International Law, 19 Mich.J.Int'l L. 799 (1998)

**Smith A**, Copyright Companion (Commentary on Copyright), 1995

**Smith G J H**, Internet Law and Regulation, Second Edition, London (1996)

**Terrett A A** Lawyer's Introduction to the Internet, in Law & the Internet - Regulating Cyberspace, Oxford (1997)

**Ulmer E**, Copyright and Contract Law, Second Edition, 1960

**Van Der Merwe D P**, Computers and Intellectual Property Law, in: The Law of South Africa (1998), Volume 5 Part 3

**Van Der Merwe D P**, Copyright and Computers, with special reference to the Internet, The South African Law Journal (1998), Vol. 115 Part I

**Vormanek A**, The Internet and Gopher, jur-pc 9/1993

**Werksmans Attorneys**, Internet Law Guide - Part Six, Jurisdiction in cyberspace, at [http://www.mbendi.co.za/werksmans/net\\_law/guide06.htm](http://www.mbendi.co.za/werksmans/net_law/guide06.htm) (visited Feb 1999)

**Wijk J van, Junne G**, Intellectual Property Protection of Advanced Technology, Changes in the Global System: Implications and Options for Developing Countries (1993), INTECH, Institute for New Technologies

**Zakon R**, Internet Timeline, at <http://www.isoc.org/zakon/Internet/History/HIT.html> (visited Oct 1998)

## **8 Table of Cases**

### **South African Cases**

*Atari, Inc & anoter v JB Radio Parts (Pty) Ltd*, Case No 17419/83

*Bosal Afrika (Pty) Ltd v Grapnel (Pty) Ltd & another*, 1985 (4) SA 882 (C)

*Econostat (Pty) Ltd v Burkhard Karl Hans Lambrecht & another* (WLD 16 May 1983 (case no 19592/81))

*Frank&Hirsch (Pty) Ltd v Roopanand Brothers (Pty) Ltd*, 1993 (4) SA 279 (A)

*Golden China TV-Game Centre & others v Nintendo Co Ltd*, 1997 (1) SA 405 (A)

*Kalamazoo Division (Pty) Ltd v Gay*, 1978 (2) SA 184 (C)

*Nintendo Co Ltd v Golden China TV-Game Centre & others*, 1995 (1) SA 229 (T)

*Northern Office Microcomputers (Pty) Ltd & others v Rosenstein*, 1981 (4) SA 123 (C)

***Performing Rights Society Ltd v Berman***, 1966 (2) SA 355 (R)

*Performing Rights Society Ltd v CiryI Theatrical Syndicate*, 1924 (1) KB

*Southern African Music Rights Organisation Ltd v Svenmill Fabrics (Pty) Ltd*, 1983 (1) SA 608 (C)

*Tolima (Pty) Ltd v Cugacius Motor Accessories (Pty) Ltd*, 1983 3 SA 504 (W)

### **United States Cases**

*Advanced Computer Servs, Inc v MAI Sys Corp*, 8445 F.Supp. 356, 30 U.S.P.Q.2d (BNA) 1443, (E.D. Va. 1994)

*American Civil Liberties Union v Reno*, 929 F.Supp. 824 (E.D. Pa. 1996)

*Columbia Pictures Indus v Aveco, Inc*, 800 F.2d 59, (3rd Cir. 1986)

*Curb v MCA Records, Inc*, 898 F. Supp. 586 (M.D. Tenn. 1995)

*Futuredontics Inc v Applied Anagramic Inc* (No. CV-97-6691 ABC (MANx, C.D. Cal.)

*Gershwin Publishing Corp v Columbia Artists Management Inc*, 443 F.2d 1159, (2d Cir. 1971)

*Iowa State University Research Foundation v ABC*, 621 F.2d, 57, (2nd Cir. 1980)

*Lewis Galoob Toys Inc v Nintendo of America Inc*, 780 F.Supp. 1283 (N.D. Cal. 1991)

*MAI Systems Corp v Peak Computer Inc*, 991 F.2d 511, 26 U.S.P.Q.2d (BNA) 1458 (9th Cir. 1993)

*Mairobie-FL, Inc v National Association of Fire Equipment Distributors and Northwest Nexus Inc*, 983 F.Supp.1167, 45 U.S.P.Q.2d (BNA) 1236 (N.D. Ill. Nov. 13, 1997)

*On Command Video Corp v Columbia Pictures Industries, Inc*, 777 F. Supp. 787, 21 U.S.P.Q.2d (BNA) 1545, (N.D. Cal. 1991)

*Playboy Enterprises, Inc v Chuckleberry Publishing, Inc*, 939 F.Supp.1032 (S.D.N.Y. 1996)

*Playboy Enterprises, Inc v Frena*, 839 F.Supp. 1552, 29 U.S.P.Q.2d (BNA) 1827 (M.D. Fla. 1993)

*Playboy Enterprises, Inc v Hardenburgh*, 982 F.Supp. 503 (N.D. Ohio 1997)

*Playboy Enterprise, Inc v Sanfilippo*, 46 U.S.P.Q.2d (BNA) 1350 (S.D. Cal. 1998)

*Playboy Enterprise, Inc v Webbworld, Inc*, 991 F.Supp. 543, 45 U.S.P.Q.2d (BNA) 1641 (N.D. Tex. 1997).

*Religious Technology Center v Lerma*, at <http://www.bna.com/e-law/cases/lerma.html> (visited June 1999)

*Religious Technology Center v Netcom On-Line Communication Services*, 907 F.Supp. 1361, 37 U.S.P.Q.2d (BNA) 1545 (N.D. Cal. 1995)

*Sega Enterprises Ltd. v Maphia* 948 F. Supp. 923, 41 U.S.P.Q.2d (BNA) 1705 (N.D. Cal. 1996)

*Sega Enterprises Ltd v Sabella*, 1997 Copyright L. Dec. (CCH) P 27, 648 (N.D. Cal. Dec. 18, 1996)

*Shetland Times Ltd v Dr Jonathan Wills and Zetnews Ltd*, at <http://www.carltons-dunde.co.uk/features/shetland.htm> (last visited April 1999)

*Sony Corp of America v Universal City Studios, Inc*, 464 U.S. 417 (1984)

*Ticketmaster Corp v Microsoft Corp*, No. 97-3055 DDP (C.D. Cal. filed Apr. 28, 1997)

*Ticketmaster Corp v Microsoft Corp*, No. 97-30555 RAP (C.D. Cal. filed Feb. 12, 1998)

*Triad Sys Corp v Southeastern Express Co*, 64 F.3d 1330, 36 U.S.P.Q.2d (BNA) 1028 (9th Cir. 1995)

*Update Art, Inc v Modiin Publishing, Ltd*, 843 F.2d 67 (2d Cir. 1988)

### **Cases from Other Countries**

*Australian Performing Right Association Ltd v Telstra Corporation Ltd*, Federal Court of Australia (1997) 28IIC 136

Bundesgerichtshof (BGH), GRUR 1991, p. 449 (Germany)

*CAPAC v International Good Music, Inc* (1963) S.C.R. 136 (Canada)

**German CompuServe judgement, at <http://www.digital-law.net/artikel5/artikel/urteil.html>**

Oberlandesgericht Düsseldorf, CR (Computer and Law) 1996, p. 728 (Germany)

Oberster Gerichtshof (OGH), 44 Ob 19/91 (Germany)

*SGAE v Hotel Blanco DonJ.SA*, (1997) 1 EIPR D-21 (Spain)

*Shetland Times Ltd v Dr Jonathan Wills and Zetnews Ltd*, at <http://www.carltons-duce.co.uk/features/shetland.htm> (last visited April 1999)

*Wilson v Chambers & Co Pty Ltd* (1926) 38 C.L.R. 138