

# PROTECTION OF COMPUTER PROGRAMS BY COPYRIGHT IN SOUTH AFRICA

OH Dean  
BA LLD  
Attorney, Pretoria

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## 1 Introduction

In the late 1970s and early 1980s, technological developments in the field of computers and the resulting increased need for and use of computer software brought about a situation where protection of software against copying and other forms of exploitation became necessary. South Africa, like most countries in the developed world, saw copyright as the area of the law best suited for providing the required protection. The alternative of affording protection to computer programs by the law of patents was discounted and in fact it was provided in section 25(2) of the Patents Act<sup>1</sup> that computer programs are not proper subject matter for registration as a patent. While the common law provides some measure of protection for computer programs by giving developers of such works claims arising out of the misuse of confidential information and unlawful competition generally, computer software developers saw their main salvation in the law of copyright.

The leading or trendsetting case in this regard was *Northern Office Microcomputers (Pty) Ltd v Rosenstein*.<sup>2</sup> In this case the court adopted the approach that a computer program is a species of literary work, one of the categories of work eligible for protection under copyright, and it applied the law of copyright to a computer program as though it was a book, article, written compilation or any other species of literary work. Subsequent South African cases followed a similar approach and in the meantime courts in Britain, the United States of America, Australia and elsewhere followed suit.

Treating a computer program as a species of literary work is a pragmatic approach and it enabled the courts to confer much needed protection upon computer programs at a time when the legislature had not properly addressed the question of the optimum manner and form of protection of this new and dynamic form of product of the intellect. In time, legislatures throughout the world began to look at customising the law of copyright to suit the nature and requirements of computer programs. In general this took the form of adapting the law of copyright as it applies to literary works to cater for the special and peculiar characteristics and requirements of computer programs,

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<sup>1</sup> 57 of 1978.

<sup>2</sup> 1981 4 SA 123 (C).

while at the same time retaining the basic concept that a computer program is a species of literary work. The view was, however, voiced internationally that the best and appropriate way of adapting the law of copyright to deal properly with computer programs is to recognise computer programs as a *sui generis* category of work eligible for copyright and to provide specially for the peculiar characteristics and requirements of this type of work without necessarily being constrained by having to deal with this form of work as though it was a manifestation of the written word on paper. In short it was argued that while the clothing of a literary work could be worn by a computer program it was by no means a comfortable or perfect fit.

The South African legislature has adopted the latter approach and in the Copyright Amendment Act<sup>3</sup> which came into operation on 10 July 1992, provision is made for computer programs to enjoy copyright as a category of work in their own right. For the first time computer programs have now achieved specific recognition in the Copyright Act<sup>4</sup> and they now wear their own tailor made clothing and no longer the borrowed clothing of their cousins, literary works.

In this article the protection which computer programs enjoy under the amended Copyright Act will be described. All references to the Copyright Act are references to the act as amended in 1992.

## 2 Definition of computer program

Against the background that computer programs have in the past been held by the South African court to constitute literary works and in an isolated instance a cinematograph film, under the act as amended computer programs are now specifically excluded from the definitions of "literary work" and "cinematograph film".<sup>5</sup> This means that once a work falls within the definition of "computer program" it ceases to be (in so far as it may have been) a literary work or a cinematograph film. I will revert to this problem below.

A "computer program" is defined to mean "a set of instructions that is 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>6</sup> From this definition it is clear that only the final stage of the development process of a computer program constitutes a "computer program" for purposes of the act. However, the "works" produced in the earlier stages of the development of a computer program, for instance flow charts and other writings which are made along the way, are capable of being protected as literary works. This follows from the fact that computer programs as final works have in the past been considered to be species of literary works but now the end product, and only the end product, has been excluded by definition from

<sup>3</sup> 125 of 1992.

<sup>4</sup> 98 of 1978.

<sup>5</sup> *S 1 s v* "computer program", "literary work" and "cinematograph film".

<sup>6</sup> *S 1 s v* "computer program".

being a species of literary work with the result that works comprised in the earlier development phases continue to constitute literary works.

The term "adaptation" for purposes of computer programs is defined to mean, *inter alia*, 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 the fixation of the original program.<sup>7</sup> In the same way that a translation of a literary work can be both a derivative of an existing work and an original work in its own right, so too can an adaptation of a computer program fall within the penumbra of the original program for its protection and in addition may qualify for protection as a substantive work in its own right.<sup>8</sup>

### 3 Requirements for the subsistence of copyright

Unlike other intellectual property rights, there is no system whereby copyright can be registered in South Africa, other than copyright in cinematograph films. In order that works in general and computer programs in particular might enjoy copyright protection in South Africa, certain requirements must be met:

- (a) The computer program must be original.<sup>9</sup> Originality in copyright law simply means that the author must have expended some skill and labour in the creation of the work. It does not mean that the work must be novel or unique.
- (b) The computer program must be reduced to a material form.<sup>10</sup>
- (c) (i) The author, or in the case of a work of joint authorship, any one author, must, at the time of the computer program's creation, have been a "qualified person".<sup>11</sup> A "qualified person" is in the case of an individual, a person who is a citizen of, domiciled in or a resident of the Republic of South Africa or a Berne Convention country, or, in the case of a juristic person, a body incorporated under the laws of the Republic of South Africa or a Berne Convention country.<sup>12</sup>
- (ii) Alternatively, the computer program must have been published first in the Republic of South Africa or a Berne Convention country or have been made in the Republic of South Africa.<sup>13</sup>

A work is "published" for purposes of qualifying for copyright by virtue of publication if copies of the work have been issued with the consent of the owner of the copyright in sufficient quantities to satisfy the reasonable requirements of the public, having regard to the nature of the work.<sup>14</sup>

<sup>7</sup> S 1 par (d) s v "adaptation".

<sup>8</sup> S 2(3).

<sup>9</sup> S 2(1).

<sup>10</sup> S 2(2).

<sup>11</sup> S 3(1).

<sup>12</sup> S 3(1) read together with s 37 and the notice issued thereunder, namely GN 136 of 1989-03-03.

<sup>13</sup> S 4(1)(f).

<sup>14</sup> S 1(5)(a).

Conferring copyright on works authored by foreign persons or first published in foreign countries as mentioned above is brought about by South Africa's adherence to the Berne Convention for the protection of literary and artistic works (South Africa has signed the Brussels text). Membership of the Berne Convention has the effect that South Africa and the other signatories (some 70 countries in all, including South Africa's major trading partners) grant reciprocal protection to each other's works. Each member country is bound to give foreign works so-called "national" treatment. Foreign works thus enjoy copyright entirely in terms of the South African act and, *vice versa*, South African works enjoy copyright in foreign countries.

Although the Berne Convention does not, of course, deal specifically with computer programs, the South African legislature has made provision for computer programs originating from abroad to be protected in South Africa in exactly the same way as would have been the case if computer programs were included in the ambit of the Berne Convention, as indeed they are, if they are treated as a species of literary work.

#### 4 The "author" of a computer program

The author of a computer program is the person who exercises control over the making of the program.<sup>15</sup> This definition is comparable to the definition of the "author" of a cinematograph film or of a sound recording who is the person by whom the arrangements for the making of the work were made. The author of a computer program dressed in its own clothing, as it now is, could be a different person from the author of a computer program dressed in the clothing of a literary work, namely the person who first makes or creates the work. This has material relevance because the Copyright Act, as amended in 1992, applies to computer programs made before the coming into force of the amendment as well as to programs made thereafter.<sup>16</sup> In other words, a computer program made before 1992 has now had a change of guise from being a "literary work" to becoming a "computer program". In effect, by virtue of the retrospectivity of the amendment effectively a change in the authorship, and therefore in principle to the initial ownership of an existing computer program, may thus have been brought about in certain instances. In order to cater for this situation the Amendment Act has introduced a savings provision which is to the effect that in the case of a computer program made prior to the effective date of the amendment, the person who first made or created the program (namely the erstwhile "literary work") is deemed to be the author of the "computer program". This provision protects and perpetuates the rights of the authors and their successors-in-title of existing computer programs, which until the coming into effect of the amendment have been literary works. The savings provision

<sup>15</sup> S 1 s v "author" par (i).

<sup>16</sup> S 43.

is, however, qualified by a presumption that if an existing computer program is original and has been published by a qualified person, that person is presumed to be the owner of the copyright subsisting in the computer program, unless the contrary is shown.<sup>17</sup> The effect of these provisions is in practice that the evidential burden of proving the subsistence of copyright in, and title to, a pre-amendment published computer program is generally placed on a par with a post-amendment computer program. In other words, a copyright owner can go about proving his title to a pre-amendment published computer program as if the program had been authored by the publisher of the program, who would generally be the person who exercised control over the making of the program.

Special provision is made for the authorship of computer generated works. The author of a literary, dramatic, musical or artistic work, or a computer program which is computer generated, is the person by whom the arrangements necessary for the creation of the work were undertaken.<sup>18</sup>

## **5 First ownership of copyright**

The author of a computer program will, in most cases, be the first owner of the copyright. There are, however, two exceptions to this rule, namely:

- (a) where the program is made in the course of the author's employment by another person under a contract of service or apprenticeship, the employer is the owner of any copyright subsisting in the work;<sup>19</sup> and
- (b) where the program is made under the direction or control of the state, the copyright is owned by the state.<sup>20</sup>

## **6 Duration of copyright**

The term of protection of a computer program is a period of 50 years from the end of the year in which the work is made available to the public with the consent of the copyright owner, or failing such an event, within 50 years of the making of the work, 50 years from the end of the year in which the work is made.<sup>21</sup>

## **7 Scope of copyright**

The scope of the copyright in a computer program, or the acts which are reserved exclusively to the copyright owner, are:

- (a) reproducing the work in any manner or form;
- (b) publishing the work if it was hitherto unpublished;
- (c) making an adaptation of the work;

<sup>17</sup> S 1(4).

<sup>18</sup> S 1 s v "author" par (h).

<sup>19</sup> S 21(d).

<sup>20</sup> S 21(2) read with s 5.

<sup>21</sup> S 3(2)(b).

- (d) reproducing or publishing an adaptation of the work; and
- (e) letting, or offering or exposing for hire by way of trade, directly or indirectly, a copy of the computer program.<sup>22</sup>

The foregoing activities are referred to as the "restricted acts".

The introduction of a rental right for computer programs is a significant innovation and it affords a form of protection to a computer program which it never enjoyed while this type of work was a species of literary work.

## 8 Infringement of copyright

The act provides for two types of infringement, that is, primary or direct infringement, on the one hand, and secondary or indirect infringement, on the other hand.

Primary or direct infringement occurs when any person, not being the owner of the copyright in a work, and without the licence of the owner, does, or causes to be done, any of the acts which fall within the scope of the copyright in that work, that is the restricted acts. Lack of knowledge or intention on the part of the infringer is no defence in respect of an act of primary infringement. Copyright is infringed when any of the restricted acts are performed in relation to the whole work or any substantial part of the work.<sup>23</sup> What in any given situation constitutes any substantial part of a work depends on the circumstances. The courts have held that the test as to what constitutes a substantial part of a work is a qualitative and not a quantitative one. Taking a small but essential part of a work can constitute taking a substantial part of that work.<sup>24</sup> For infringement by means of reproduction to occur actual copying must take place. Making a similar work or even an identical work does not constitute infringement if the later work is not produced by copying the earlier work but is produced independently.<sup>25</sup>

Secondary or indirect infringement occurs specifically in the case of a computer program when any person, without the licence of the owner of the copyright, in the knowledge that it is an infringing copy of the work, imports an article into South Africa for a purpose other than his private or domestic use; sells or lets or offers to do so any article, distributes any article for the purposes of trade or any other purpose to such an extent that the owner of the copyright in question is prejudicially affected thereby; or acquires an article relating to a computer program.<sup>26</sup>

An article is an "infringing copy" of a computer program if the making of that article constitutes an infringement of the copyright in that work, or,

<sup>22</sup> S 11B.

<sup>23</sup> S 23(1).

<sup>24</sup> *Ehrenberg Engineering (Pty) Ltd v Topka t/a Topring Manufacturing and Engineering TPD* Case no I 8652/77 25 of the typewritten judgment; *Galago Publishers (Pty) Ltd & Another v Erasmus* 1989 1 SA 276 (A); *Fax Directories (Pty) Ltd v SA Fax Listings CC* 1990 2 SA 164 (D).

<sup>25</sup> *Bosal Afrika (Pty) Ltd v Grapnel (Pty) Ltd* 1985 4 SA 882 (C) and *Galago Publishers (Pty) Ltd v Erasmus* 1989 1 SA 276 (A).

<sup>26</sup> S 23(2).

in the case of an imported article, would have constituted an infringement if the article had hypothetically been made in South Africa by the person who actually made it. So-called "guilty knowledge" is a prerequisite for secondary or indirect copyright infringement. Importing and trading in so-called "parallel imports" or "grey goods" can constitute an indirect or secondary act of copyright infringement.<sup>27</sup>

Where copyright infringement occurs the copyright owner is entitled to an interdict and delivery of infringing copies or plates.<sup>28</sup> Damages can be awarded by the court except where the defendant can show that he was not aware, and had no reasonable grounds for suspecting, that copyright subsisted in the work. Subsequent to the 1992 Amendment Act the court is specifically empowered to compute damages by way of determining a reasonable royalty. A reasonable royalty is one which would have been payable under the circumstances by a licensee or sub-licensee and in determining the amount the court must take into account the extent and nature of the infringement of copyright and the amount which could be payable in respect of the exercise of the relevant rights of copyright by some other person.<sup>29</sup> This reasonable royalty appears to have a notional character to it and it is not necessarily the actual amount that the infringer would have been required by the copyright owner to pay in respect of the exercise of the right in question but rather an amount which a notional licensee could have been required to pay. Prior to its amendment in 1992, the act provided for the award of an account of profits as an alternative to damages but there is some uncertainty as to the nature and effect of this remedy which will only in principle be available in the case of infringements committed prior to the amendment.<sup>30</sup> Provision is also made for an award of punitive or additional damages in circumstances where the court, having regard to all considerations including the flagrancy of the infringement and any benefit shown to have accrued to the defendant by reason of the infringement, is satisfied that effective relief would not otherwise be available to the plaintiff.<sup>31</sup>

The act contains certain presumptions which assist a plaintiff conducting copyright infringement proceedings in respect of a computer program to prove his case. The following presumptions are worthy of note:

- (a) Where the name of the author of a published computer program appears on that program and that name is the author's correct name it is presumed, unless the contrary is proved, that such person is the author of the program.<sup>32</sup>
- (b) Where it is established in infringement proceedings relating to a computer program which is anonymous or pseudonymous that the program was first published in South Africa or a Berne Convention

<sup>27</sup> See Dean "Parallel Importation : Infringement of Copyright" 1983 *SALJ* 258.

<sup>28</sup> S 24(1).

<sup>29</sup> S 24(1A).

<sup>30</sup> See Dean "Account of Profits in South African Copyright Law" 1986 *SALJ* 103.

<sup>31</sup> S 24(3).

<sup>32</sup> S 26(1).

country during the preceding 50 years and that the name of a person purporting to be that of the publisher appeared on the program as it was first published, copyright is presumed to subsist in the program and the named person is presumed to have been the owner of the copyright at the time of publication, unless the contrary is shown.<sup>33</sup>

- (c) If the author of a computer program is dead it is presumed, unless the contrary is shown, that the computer program is an original work.<sup>34</sup>
- (d) If it is shown that a defendant carried on business by selling, letting or distributing copies of computer programs and that person is found in possession of a copy of a computer program it is presumed, unless the contrary is shown, that such person traded in the copy in question.<sup>35</sup>
- (e) Where a restricted act in respect of a computer program is shown to have been performed without the authority of an exclusive licensee it is presumed, unless the contrary is shown, that the relevant act was also done without the authority of the copyright owner.<sup>36</sup>

## 9 Exemptions from copyright infringement

Special provision is made for certain acts which in principle would constitute infringement of the copyright in a computer program to be exempt. The most important are the following:

- (a) Any fair dealing with a computer program for the purposes of criticism or review of it or another work or for purposes of reporting current events in the media, provided proper acknowledgement is given to the author and the source.<sup>37</sup>
- (b) Taking a quotation or excerpt from a computer program which is lawfully available to the public provided the quotation is compatible with fair practice and is not excessive in extent in the light of the purpose for which it is used, and proper acknowledgement is given to the author and the source.<sup>38</sup>
- (c) Using a computer program to the extent justified by the purpose by way of illustration in any medium used for teaching, provided the use is compatible with fair practice and proper acknowledgement is given to the author and the source of the material used.<sup>39</sup>
- (d) Using a computer program in a *bona fide* demonstration of equipment to a client by a trader in such equipment.<sup>40</sup>
- (e) Where a licensee of a computer program makes back-up copies to an extent reasonably necessary and those back-up copies are intended

<sup>33</sup> S 26(3).

<sup>34</sup> S 26(4).

<sup>35</sup> S 26(10).

<sup>36</sup> S 26(11).

<sup>37</sup> S 19B(1) read with s 12(1)(b).

<sup>38</sup> S 19B(1) read with s 12(3).

<sup>39</sup> S 19B(1) read with read s 12(4).

<sup>40</sup> S 19B(1) read with s 12(12).

exclusively for personal or private purposes, provided the back-up copies must be destroyed when the licence in respect of the computer program terminates.<sup>41</sup>

## 10 Assignment

Copyright is transmissible by assignment, testamentary disposition or by operation of law. An assignment can be limited as to the rights, the term and the territory. An assignment has no effect unless it is in writing and signed by the assignor. It is possible to assign the copyright in a future work, or the copyright in an existing work in which copyright does not subsist but will come into being in the future.<sup>42</sup>

Notwithstanding the transfer of the copyright in a computer program the author has the right to claim authorship in the work and to object to any distortion, mutilation or other modification of it where such action is prejudicial to the honour or reputation of the author. This right is the author's so-called "moral right". The author of a computer program or a work associated with a computer program may, however, not prevent or object to modifications of his work that are absolutely necessary on technical grounds or for the purposes of commercial exploitation of the work.<sup>43</sup>

## 11 Licences

A copyright owner can authorise or license a third party to exercise one or more of the rights comprised in the copyright. A licence can be oral or in writing, or even inferred from conduct. An exclusive licence or exclusive sub-licence, however, is not effective as such, unless it is in writing and signed by the licensor.<sup>44</sup> Whereas non-exclusive licensees cannot enforce any rights against third parties, the act specifically grants exclusive licensees and exclusive sub-licensees the same rights of action to sue for infringement as copyright owners.<sup>45</sup>

The act makes provision for compulsory licences in respect of all copyrighted works including computer programs to be granted by a "Copyright Tribunal". The Tribunal will grant a licence where the refusal to do so by the copyright holder is unreasonable. The Copyright Tribunal is at large to grant any type of licence in respect of a computer program, subject to the payment of a reasonable royalty by the "licensee". It can override the refusal to grant a licence by all types of licensors, including licensing bodies and other persons. The decision of the Copyright Tribunal to grant or refuse a licence is subject to appeal to the supreme court.<sup>46</sup>

<sup>41</sup> S 19B(2).

<sup>42</sup> S 22.

<sup>43</sup> S 20(1).

<sup>44</sup> S 22(3).

<sup>45</sup> S 25.

<sup>46</sup> Ch 3 comprising s 29-36.

## 12 Criminal offences

Copyright infringement can constitute a criminal offence in certain circumstances. These circumstances include, while having knowledge that the items in question are infringing copies of a work, making or importing articles by way of trade, and selling, letting, or offering to do so, or distributing to a substantial extent, such articles.<sup>47</sup> It is also an offence to be in possession of a master version of a computer program while knowing that it is to be used for making infringing copies of that program.<sup>48</sup>

Severe penalties can be imposed by the court for criminal copyright infringement. The act provides that a maximum fine of R5 000,00 or imprisonment for 3 years, or both such fine and such imprisonment can be imposed for each article to which the offence relates, in the case of a first offence. In the case of a second offence, these penalties are increased to R10 000,00 or 5 years respectively.<sup>49</sup>

## 13 Retrospective operation of the act

The act applies to computer programs made before its commencement in 1979 as well as to programs made thereafter, subject to two provisos, namely:

- (a) the ownership, duration or existence of any copyright which subsisted under the Copyright Act of 1965, that is copyright in a computer program as a literary work which was made prior to 1 January 1979, is unaffected; and
- (b) no copyright is created in any type of work in which copyright could not subsist prior to 11 September 1965 (namely a computer program in its own category) but not as a literary work.<sup>50</sup>

In terms of the foregoing, a pre-1965 computer program (if it existed) cannot be categorised as a "computer program" but would continue to enjoy protection as a species of literary work. A program made between 1965 and 1978 would retrospectively be categorised as a "computer program" and enjoy copyright in that form but would continue to enjoy in tandem the copyright as a literary work conferred upon it by the Copyright Act. A computer program made subsequent to 1 January 1979 only enjoys copyright as a computer program and not as a literary work.

## 14 Conclusion

It is felt that computer programs, having been fitted out in tailor-made clothing under the Copyright Act, are now adequately protected by South African law and that the basis has been laid for this form of intellectual product to develop and thrive in South Africa. Sufficient measures are

<sup>47</sup> S 27(1).

<sup>48</sup> S 27(2).

<sup>49</sup> S 27(6).

<sup>50</sup> S 43.

provided by the law to ward off the unwelcome attention of software pirates who by their parasitical activities could bleed their victims dry. It is up to computer program developers and owners to use the means at their disposal provided by the law to nurture and cultivate their valuable products.

### OPSOMMING

Weens tegnologiese vooruitgang op die gebied van rekenaars gedurende die 1970's en 1980's het die behoefte ontstaan om rekenaarprogramme (sagteware) teen kopiëring en ander vorme van misbruik vanuit regsweë te beskerm. Suid-Afrikaanse howe het, soos in die meeste ander lande, hul toevlug geneem tot outeursreg en sagteware is beskerm as synde 'n verskyningsvorm van 'n "letterkundige werk". Dit was slegs 'n tydelike en pragmatiese benadering. Ondertussen is outeursregwetgewing aangepas om voorsiening te maak vir die unieke aard van sagteware met die uitvaardiging van die Wysigingswet op Outeursreg 125 van 1992. In die wet word rekenaarprogramme erken as 'n afsonderlike kategorie (klas) werk wat, as sodanig, afsonderlike beskerming geniet. Ten einde dié doel te verwesenlik, word 'n "rekenaarprogram" gedefinieer; word aangedui wat "aanwen-ding" van 'n rekenaarprogram is (wat van wesenlike belang by outeursregskending is); word bepaal wie as die outeur van 'n rekenaarprogram geag word; word bepaal wat die lewensduur van outeursreg in 'n rekenaarprogram is; ensovoorts. Weens die unieke aard van rekenaarprogramme en weens die gemak waarmee dit gekopieer kan word, is sekere vermoedens ten gunse van eisers geskep, wat hul bewyslas tot 'n mate verlig. Aan die teenkant word gebruikers beskerm deur gemagtigde kopiëring in sekere omskrewe gevalle toe te laat. Ook van belang is die terugwerkende en strafregtelike bepalinge in die wet. Daar word gemeen dat die basis hierdeur gelê is vir die beskerming van rekenaarprogramme en sodoende die plaaslike ontwikkeling van hierdie intellektuele produk aan te spoor. Hierdie artikel is dan juis daarop gemik om die 1992 Wysigingswet op Outeursreg te bespreek en te evalueer.