THE LEGAL PROTECTION OF COMPUTER SOFTWARE

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Abstract

The process by which software should be protected has been controversial. Equally controversial is the determination of what aspect of software is protectable or whether it should be protected at all. The approach to the controversies manifest in legal cases viewed-differently by stakeholders, the academic community and individual software creators, with the industrialized mid non-industrialized countries having different opinions. This paper will be looking at the meaning, nature and scope of computer software, whether computer software is protectable at all and if so, what aspect is protectable, what constitute Lin infringement of computer software, the remedies available to an aggrieved person whose computer software is infringed and the recommendation on how best to reduce the infringement of computer software.

Introduction

There has been controversy on whether computer software is protectable and if so what aspect of it is protectable. A computer is a group of electronic and electromechanical machines working together to process data known as software. The computer software is the program and "other operating information used by a computer as distinguishable from a computer hardware which is the machine which we see and feel that is the physical parts of the computer, ancillary equipments and mechanical appurtenances. Software denotes the information loaded into the machine (usually by card or teleprompter) and the instructions/directions given to the machine as to what it is to do and upon what materials. It includes the program documentation that comes with a program as well as the program itself. Section 51 Copyright Act Cap. C28 Laws of the Federation 2004 defines "computer programs" as a set of statements or instructions to be used directly or indirectly in a computer to bring a certain result. We will be looking at the controversy on whether computer software is protectable and if so what aspect of it is protectable.

The Legal Protection of Computer Software

There has been controversy as to whether software is protectable at all, what aspect of software is protectable and the process by which software should be protected.

The approach to the controversies manifest in legal cases viewed differently by stakeholders, the academic community and individual software creators, with the industrialized and non-industrialized countries having different opinions.

Legal Cases

The concerns of the courts have mostly been on whether computer software is protectable at all. There have also been occasions to determine which aspects of it are protectable. The issue of whether computer software is protectable al all has been settled by statutes. On what aspect of computer software that is protectable, the source code, object code audiovisual displays and micro code have been given protection, Equally controversial is the determination—of the substantial similarity of two or more programs. Substantial similarity is a subjective test for copyright infringement. A plaintiff must show that the alleged infringer has access to his copyrighted work and that there is works at the level of protected expression. An alleged infringing work does not need to be 100% identical to another in order to infringe its copyright. Deciding how the level of similarity can be said to be an infringement is difficult even for conventional works like plays or book. For computer software, the ordinary observer making the determination may need to be a

technical expert. (Susan A. Dunn, "Defining the Scope of Copyright Protection for Computer Software" Stanford Law Review, Vol.38, January, 1986 pp. 469 - 534). The Courts have continued to test and explore the boundaries of current laws and the most suitable to protect rights in computer software. Many in the industry and in the legal profession believed that if properly applied, the traditional modes of protecting intellectual properly are adequate to protect software. They argue that *"sui generis"* approaches risk obsolescence and lack the predictability provided by legal precedents as well as established treaty structure providing international protection. (For example, the Berne Convention provides for reciprocal copyright protection in over 150 countries). Protagonists of *"sui generis"* protection, on the other hand, consider it preferable to forcing software to fit models that are suited toother types of works and discoveries. They argue that even a slight modification of the current modes of protection, would protect software better, considering its distinctiveness and uniqueness. At the same time, a third group feels that the current system is not broken and therefore does not need any: fixing or at least can be "fine-tuned" within the existing legal framework.

Stakeholders and Users

There is a public interest in the forms and level of software protection and its effects on." innovation, technology transfer and economic growth. At the micro level, the public has specific-expectations and concerns but they are also concerned with the quality, price, functionality, case of use, variety of software and the necessary support required for using it. Many consider anti-coping technology devices undesirable. They argue that such device that curtails the usage of a.program, prevents modification of the software or disables it from making backup copies, will compel them to learn a unique set of commands and features for each program. Cost implications of such a situation is a factor considered especially by institutions and businesses that have to buy dozens of the same software package for their terminals. Devising or enforcing protections, even against literal copying by private individuals is complicated by public sentiment that non commercial private copying is acceptable. On the other hand, businesses and individuals who use software tools to create other products or services, want a stable and predictable legal environment that would enable them to know what uses are permitted, those not permitted and the ones that must be licensed from developers. A recent survey of nearly 200 Management Information System (MIS) executives in the United State of America showed that almost one third of them reported that "look and feel" law suits will make them shy away from software clauses. The "software works force" that uses software as part of its jobs would prefer to have transferable skills instead of having to learn afresh any time to change their jobs. It will be easier for example, to learn a new word-processing package if it has commands and functions similar to other package already known to a user. An addition to the controversy is the fact that although users want softwares that are simple and adaptable, they still prefer more powerful softwares with improved functions, some consistent and standard interfaces can conflict with ease of use and improved functionality.

Software Proprietors

Proprietors of software are concerned about the profit that would accrue from their efforts. The basic rationale for seeking adequate intellectual property protection for software is to give commercial software developers adequate market incentives to invest the time and resources needed to produce and disseminate innovative products. Direct losses of revenue due to piracy are not the only concern of developers. They also want to gain and maintain a competitive advantage in the market. One source of competitive advantage is to have "lead time". The first company to introduce innovative software to the market benefited from it. The controversy here is that the trends in software technology, like computer aided software developments are eroding the advantages of lead-time strategy. Another market advantage that created a controversy is the standardization of interfaces. Users find common interfaces attractive because they allow their current hardware and software to be compatible with new products or making it easier to learn how to use new software. Some software developers want their programs lo have 'user interfaces', software interfaces (e.g. degree of data portability between programs) or machine interfaces (e.g. operating systems needed to run the programs) similar to or in common with the programs of other developers. Their intention is to gain a larger potential market but other developers such as those who are first to market a radically. innovative program may see their interfaces as critical part of their competitive advantage. They would therefore, want to protect their interfaces in order to reap economic rewards for developing them. On the other hand, vendors are

concerned about literal copying of an entire program for sale by, "pirate" competitors. These controversies had to be dealt with. In theory, provisions of the intellectual. property laws can guide against piracy but in practice, enforcement of these laws is difficult especially when applied to private copying or in another Country. Copying of software is easy and cheap. Moreover, private copying of software is as natural as making home audiotapes or videotapes *by'.* many individuals and allows them to avoid a lot of expenses. Some businesses are squarely on making and selling authorized copies of software. The legal status of some software engineering practices is not clear under intellectual protection laws. Some practitioners think that "clean room" reverse" engineering procedures might be acceptable practices under the law of copyright because a second program that is developed independently without access to the protected expression in a prior program does not infringe copyright of the previous one.

Academic Community

The view of the academic research communities on the intellectual property protection of software is different from that of commercial developers. They are more disposed to free access to information and an equal free exchange of such information. Their view is significantly influenced by their interest in use of software which is based on professional prestige, publication in scholarly journals and tenure of their jobs. Many in this community are concerned that over protection might hamper research and long-term growth in their fields. Some believe that artistic expression of a user interface should be protected, but not the way commands are invoked at the user interface. They believe that forcing developers to contrive meaning-less variations in interfaces solely to avoid legal entanglements will hinder research and development that rely on the aid of software.

Industrialized and Non industrialized Countries

Between the industrialized and non industrialized countries, raging controversy is on whether there is the need to give intellectual property protection to software. The highly industrialized countries are the major producers of software. They argue that strong protection should be given to' proprietors of software because a lot of money and time is expended in producing them. They are however, cognizant of the fact that countries with large populations such as China, Indian, Indonesia, Brazil and Nigeria, though not highly developed, offer huge potential markets for their software products. Nonetheless, they opine that such countries need the strongest possible protection to software exported to them from, and owned by the industrialized countries. On the other hand, the non industrialized countries prefer open source software (OSS) which does not place any restriction on usage of software. With strong intellectual property protection, the users in non-industrialized countries cannot get access to the source code of a computer program. In that wise, they cannot repair or debug any faulty program nor can they adapt the program to another use. The debate over which kind of software to be used particularly by the developing countries is heating up. Many argue that the choice will have long term implications as many developing African nations take steps to join the information society. The non-industrialized nations also see the cost of proprietary software as prohibitive. Even when computers are sent to them through computer-aid programs, they still find those computers less attractive when they are loaded with bespoke software package. A director of Computer Aid once said:

> Until recently, there really was not another choice but now there is. Instead of using proprietary software, we now re-load all of (he machines with open source software. It is much cheaper for us and the end users and is a much appropriate technology for use in places such as Africa... with the exception of a few parts of South Africa, there is not a single Government or a school system anywhere in Africa that can afford the costs of a Microsoft licence for their school systems. (Interview of Tony Robert by Alan Story).

Many non-industrialized nations have reached the same conclusion as illustrated above. However, some software developers and information technology workers in industrialized nations feel compelled to support OSS on the same premise that it offers a lower cost of ownership. This was revealed in a leaked memorandum on a survey conducted by Microsoft in U.S.A. Brazil, France, Germany, Sweden and Japan. (Ard. S. "Microsoft Memo: Linux fight Backfiring" *E* Net News 6" November, 2002).

What Constitute an Infringement of Computer Software?

Black's Law Dictionary 5lh ed. p. 702 defines infringement per se as a breaking into, a trespass or encroachment upon a violation of the law, regulation, contract or right.

Osborn's Concise Law Dictionary 7th ed. p.179 defines infringement as an interference with, or the violation of the right of another, particularly the right to a trademark, patent or copyright.

The Nigerian Copyright Act Cap. C.28 Laws of the Federation 2004 in its Section 1(1) provides that the following shall be eligible for copyright protection:

(a) Literary works
(b) Musical works
(c) Artistic works
(d) Cinematograph films
(e) Sound recordings; and
(f) Broadcasts.

Section 51 of the Copyright Act Cap. C28 Laws of the Federation 2004 further defined literary "works" as follows:-

"Literary work" includes, irrespective of literary quality, any of the following works or works similar thereto:-

(a) Novels, stones and poetical works;
(b) Plays, stage directions, film scenarios and broadcasting scripts;
(c) Choreographic works;
(d) Computer programmes;
(e) Textbooks, treatises, histories, biographies, essays and articles;
(f) Encyclopedias, dictionaries, directories and anthologies;
(g) Letters, reports and memoranda;
(h) Lectures, addresses and sermons;
(i) Law reports, excluding decisions of courts;
(j) Written tables or compilation;

From the foregoing, we can say that software which is a computer programme is protected under the Act. We can also say that software is part of a literary work which falls under copyright.

Section 15(1) of the Copyright Act Cap. C28 Laws of the Federation 2004 provides that the right of the copyright owner will be deemed to be infringed by any person who without the licence or authorization of the owner of the copyright, does any of the following acts:

(a) Does or causes any other person to do an act, the doing of which is controlled by copyright.
(b) Imports into Nigeria, otherwise than for his private or domestic use, any article in respect of which copyright is infringed.
(c) Exhibits in public any article in respect of which copyright is infringed.
(d) Distributes by way of trade, offers for sale, hire or otherwise or for any purpose prejudicial to' the owner of the copyright, any article in respect of which copyright is infringed.
(e) Makes or has in his possession plates, master-tapes, machines, equipment or contrivances used for the purpose of making infringed copies of the work.
(f) Permits a place of public entertainment or a business to be used for a performance in the public of the work, where the performance constitutes an infringement of the copyright in the work, unless the person permitting the place to be used was not aware and had no reasonable ground for suspecting that the performance would be an infringement of the copyright.
(g) Performs or causes to be performed for the purposes of trade or business or as supporting facility to a trade or business any work in which copyright subsists.

From the foregoing, we can say that any person who does any of the above has infringed the right of the software owner.

An owner of a software whose right has been infringed through any of the acts stated above can enforce such right through civil and criminal proceedings. In the case of civil proceedings, the remedies available are Damages, Injunction, Anton Filler order, Account of profit and Conversion. We shall examine these in turn:

1. **Damages:** Under this head we have general and special damages, exemplary or punitive damages and nominal damages.

General and Special Damages: General damages are losses which flow naturally from the defendant's conduct and its quantum need not be pleaded or proved as it is generally presumed by law. On the other hand, special damages are damages which law does not presume but must be specifically pleaded and proved.

Exemplary or Punitive Damages: This class of damages is not intended to compensate the plaintiff but to punish the defendant and to deter him from similar behaviour in the future.

Nominal Damages: These are awarded in those cases where the plaintiff establishes a violation of his rights by the defendant but he is unable to show that he suffered any actual damages as a result of the defendant's wrongdoing. It may also be awarded where damages has been proved but no evidence has been given as to its extent so that the assessment of compensatory damages is impossible,

2. **Injunction:** It is granted by the court to prevent a person from doing or continuing to do a wrong or to compel a person lo do an act.

3. **Anton Filler Order:** It is an order which can be given for inspection, photographing and delivery up of infringing materials in the possession or control of an infringer.

4. **Account of Profit:** One type of remedy that may be granted by the courts is that of an account of profits. The plaintiff is entitled to the profit on each item wrongly sold. The court can compel the defendant lo pay to the plaintiff the amount of profit he earned when he (the defendant) was selling the infringing copy.

5. **Right of Conversion:** Conversion rights are also available to a party whose rights have been infringed.

In respect of criminal proceedings there are stringent provisions in the law for any criminal act committed against the copyright owner. Thus, any person who

(a) makes or causes to be made for sale, hire, or for the purposes of trade or business any infringing copy of a work in which copyright subsists; or

(b) imports or causes to be imported into Nigeria a copy of any work which if it had been made in Nigeria would be an infringing copy; or

(c) makes, causes to be made, has in his possession, any plate, master tape, machine, equipment or contrivance for the purposes of making any infringing copy of any such work shall, unless he proves to the satisfaction of the Court that he did not know and had no reason to believe' that any such copy was an infringing copy of any such work, or that such plates, master tape, machine, equipment or contrivance was not for the purpose of making infringing copies of any such work, is guilty of an offence under this Act and liable on conviction to a fine of an amount not exceeding N 1,000 for every copy dealt with in contravention of this section or a term of imprisonment not exceeding five years, or to both such fine and imprisonment.

Furthermore, Section 20(2) of the Copyright Act Cap. C28 Laws of the Federation 2004 provides that any person who

(a) sells or lets for hire or for the purposes of trade or business, exposes or offers for sale or hires any infringing copy of any work in which copyright subsists; or

(b) distributes for the purposes of trade or business any infringing copy of any such work; or

(c) has in his possession, other than for his private or domestic use any infringing copy of any such work; or

has in his possession, sells, lets for hire or distribution for the purposes of trade or business, or exposes or offers for sale or hire any copy of a work which, if it had been made in Nigeria, would be an infringing copy of any such work, guilty of an offence under this Act and liable on conviction to a fine of N100 for every copy dealt with in contravention of this section, or a

term of imprisonment not exceeding two years or, in the case of an individual, to both such fine and imprisonment.

Similarly, Section 20(3) of the Copyright Act Cap. C28 Laws of the Federation 2004 provide any person who, without the consent of the owners, distributes in public for commercial purposes, copies of a work in which copyright subsists by way of rental, lease, hire, loan or similar arrangement, is guilty of an offence and liable upon conviction to a fine of N100 for every copy dealt with or imprisonment for six months or both such fine and imprisonment,

Conclusion

In the foregoing, we have examined through the statutory provisions and decided cases whether computer software should be protected, what aspect of it should be protected and the process by which software should be protected, what constitute an infringement of computer software and the remedies available to an aggrieved person whose computer software is infringed. It is sad to note that despite the stringent civil and criminal provision and the resolution of the controversy in respect of protection of computer software, the infringement of computer software still goes on unabated in this country.

It is recommended that both the state and the individual should make a combined effort to prosecute immediately those who are arrested for infringement without minding the legal cost. Stiffer penalties should be introduced in our law for the infringement of those rights.

It is also necessary to enlighten people about this area of law. This can be done by introducing it into the schools curricula, organizing seminars and workshops all over the country. When all these are done, the problems will reduce which in turn will increase the pace of development in our country.

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