

Protecting Computer Programs – The limits of protection

In this article we provide an overview of the law relating to the protection of computer programs. Generally we find that clients are not concerned that they may be directly copying code but sometimes they wish to know about the effects of the similarities between software they develop and that of competitors. We set out here some of the limits of protection.

The legal protection of computer programs.

Computer programs are protected in Ireland principally under the law of copyright although the laws relating to databases, patents and registered designs also have application to the legal protection of software but not to the same degree as copyright.

The Irish law relating to copyright protection of computer programs is driven principally by the terms of an EU directive known as the Software Directive (directive 2009/224/EC of 23rd April 2009 - the first version of such directive was a directive of the 14th May 1991). When the EU issue a directive, the Irish legal system must introduce rules which incorporates the directive into Irish law. The EU directive is implemented in Ireland under the terms of the Copyright and Related Rights Act 2000. Section 17(2) of the 2000 Act provides that copyright exists in original literary works and under the terms of the 2000 Act a literary work is defined to include a computer program which includes preparatory designs to a computer program. Therefore it is recognised under EU and Irish law that computer programs are protected by the law of copyright and are treated as literary works.

The EU directive on software protection also provides that protection of a computer program applies to the expression in any form of a computer program. It also provides however that ideas and principles which underlie any element of a computer program are not protected by copyright.

In summary, based on the above, the law protects the source code of a computer program as a literary work. This means that the owner of the copyright in the source code has the right to prevent others from doing certain acts in connection with the source code. These are referred to as the restricted acts. The restricted acts in copyright include the right to prevent others from copying the source code or a substantial part, storing the work in any medium, making transient copies, making a translation of the work etc. As a corollary to the right to prevent others from doing the restricted acts, copyright will be infringed by any person who conducts the restricted acts. Therefore, it is an infringement to copy source code or to translate source code.

The functions of a computer program

From time to time clients develop software within competing fields. Hopefully this does not involve any direct copying of code but concerns can arise if new software bears the same functionality or look and feel of competitors. In this context we look at the protection of other elements of a computer program, outside of the code, such as preparatory materials, the design of the code, the functionality of the program, its look and feel. Sometimes, these are referred to as elements of a program at a different level of abstraction from the code itself.

Various UK cases on the topic of protection of computer programs by the law of copyright make it clear that the functionality of the computer program is not protectable by the law of copyright. (see in particular *Navitaire v Easyjet* [2004] EWCH 1725 (Ch) and *SAS Institute v World Programming Ltd* [2010] EWHC 1829 (Ch)) Therefore a developer is free to write a computer program with similar or identical functionality to an existing program and not infringe the copyright in the existing computer program. The judges in various cases have likened the circumstances to the creation by a chef of a particular dish. As long as the chef assembles materials of a dish according to their own guidance and rules it does not matter that the dish tastes or looks exactly the same as an existing dish of a chef. No rights are infringed of the existing creation. These types of principles arose in the only Irish case to comprehensively look at the issue of infringement of software by competing developers, namely the case of *Koger Inc v James O'Donnell & Ors* [2010] IEHC 350. This case involved the

development of a financial administration software by a group of individuals after they left the employment of the plaintiff company who brought the infringement proceedings. The plaintiff's software was called NTAS and the defendant's software was called ManTra. There was some limited textual similarities between NTAS and ManTra but these arose principally out of the fact that both software systems were within similar industries and so similar technical terms would be common. The court went on to say

It is also the case, as is apparent from the earlier part of this judgment, that such limited similarities as arise between ManTra and NTAS arise out of functional necessity. In addressing that functional necessity the persons developing ManTra did so using their own expertise and knowledge and did not do so by the use of a copy or access to NTAS. The product or code within ManTra was as a result of independent design.

Similarly, if the functionality of a computer program is not the subject of copyright protection it stands to reason then that the general problem that a computer program solves or the underlying concepts of a computer program is likewise not protectable by the law relating to copyright. It appears then that there is a relatively narrow degree of protection for computer software which principally concerns the written code.

The design of a computer program

A further refinement of this however can be made in that while case law has suggested that the functionality of a program is not protected by copyright, the design of a program could be the subject of copyright protection. The courts do tend to make a distinction between protecting the design of a program and protecting its functionality. So not only should source code be examined in determining whether copyright infringement occurs the design of the program as well could be a matter of protection. The court in the case of *SAS Institute* referred to above, set the issue as follows:-

I accept that copyright protection is not limited to the text of the source code of the program, but extends to protecting the design of the program, that is, what has been referred to in some cases as its "structure, sequence and organisation". If there were any doubt about this, then the conferring of protection on "preparatory design material" confirms it. But there is a distinction between protecting the design of the program and protecting its functionality. It is perfectly possible to create a computer program which replicates the functionality of an existing program, yet whose design is quite different.

In addition, the courts have also held in this area that the copyright in a computer program does not extend to protecting programming languages, or interfaces used in connection with a computer program.

Look and feel

While the functionality of a computer program may not be something which is now protected by copyright one must make a distinction between this and the general look and feel of a computer program. It is generally recognised that elements of look and feel can be the subject of copyright protection but not necessarily as computer programs. Look and feel encompasses, icons, drop-down menus, file windows, texts, logos, characters etc appearing on a screen. All of these elements which are visible to the human eye and feed into the look and feel of a computer program are protected by copyright as artistic or literary works. Therefore in any development of a competing system a developer should ensure that the icons and general user interface (GUI) of the competing system would not copy any elements of that of any existing systems.

Conclusion

The scope of protection of computer programs is somewhat narrow. What the law attempts to do, is to strike a balance between protecting the skill and effort that goes into creating a specific computer program without extending the copyright monopoly too far. There is wide scope for competitors through their own efforts to create software with similar functionality or design, as long as that effort is independent and does not rely on literal copying of code or preparatory materials.

For more information on the topic of software law or technology issues generally, contact Colm Kelly at ckelly@hcalaw.ie