COPYRIGHT AMENDMENT BILL 1984

Date Introduced: 4 June 1984
House: Senate
Presented by: Senator the Hon. G.J. Evans, Q.C., Attorney-General

Short Digest of Bill

Purpose

To provide for copyright protection of computer programs, with special extension to certain adaptations of such programs; and to authorize the retention of backup copies of computer software while specifically prohibiting the making of copies using means of telecommunications to transmit the copyright work.

Background

Early computers were scarce, expensive, frequently confined to one particularly useful task and programmed specifically for it by onsite programmers. The ubiquity of computers at the present time has enabled the exploitation of economies of scale by the rapidly growing software industry. This process is not complete, as software is becoming more voluminous, more specific, more capable and correspondingly more intricate and expensive to produce. The software industry remains labour-intensive; its products represent an expensive investment.

Economic factors have added weight to philosophical notions of software as property. It is possible to distinguish a continuum of software usage, from the mainframe installations of large institutions, supported by computer staff, to the personal computer of an individual. In the former case, copyright protection may be sought as a collateral remedy to breach of a licence agreement where a software purchaser duplicates the software and uses it at all his installations although it is licensed for only one. In the latter case, the costings of the software creator are still invalidated by duplication because there has been a customer where there has been no sale. There is in this case the additional dimension of a mass market. Considerations may be diametrically opposed. In the former case, the highly specific capabilities of the software justify its high price, with added attractions of service guarantees relating to software maintenance and
enhancements. In the latter case, the standardized nature of the software and its high volume sales make the code easier to come by and assistance among the user community a viable alternative.

A further distinction may be drawn between operating system software, which fulfils functions specific to the computer equipment, and applications software, which is designed to perform a useful function, such as payroll calculation or word processing. Applications software enjoys a degree of natural protection from illicit duplication in that it has been designed assuming the availability of facilities offered by a particular operating system and will not run at all without them. This is no bar however when the operating system is itself very common. Examples include IBM operating systems which have been implemented by a range of other computer manufacturers, and the CP/M operating system which has been implemented on a large number of microcomputers.

The particular relevance of a widespread operating system is that it may encourage a large pool of "public domain" applications software for which copyright protection is not claimed. The rationale for free availability may be that the software development has occurred at a publicly-funded institution, or that the software is an academic contribution (e.g. dissemination of a new computer language through non-profit publication of its compiler). "Public domain" has also been used as a euphemism for pirated software.

A second feature giving natural protection is that the software version on which a computer actually runs is coded so efficiently as to be incomprehensible. This "object code" is produced automatically by compiling a "source" program written in a language which permits everything relevant to be denoted by meaningful names. Because a purchaser of the program will need to know "what" it does but never "how", the program is sold in object form only. The program is then usable but not comprehensible, alterable or readily adaptable. Whether this "object" version maintains any status as a literary work possessed by the "source" version has been recently litigated.

Software is generally distributed on magnetic disks or tapes, or over a telecommunications line. Copying is no more difficult than audio or video taping in most cases. The required program is then loaded into a computer memory to be run. Some operating system software is so fundamentally useful that it is always needed in memory and will never be overwritten. The software may be permanently recorded in read only memory (ROM) and sold as part of the
machine. In the Apple case, computers were marketed in Australia having ROM code identical to that of the Apple computer. This was useful to purchasers because it implied that the machines would run the rest of the Apple operating system and any of the wide range of applications software developed for the Apple. It was contended by Apple to infringe their copyright in the code.

In the case of Apple Computer vs Computer Edge Pty Ltd, decided by the Federal Court in December 1983, Beaumont J. decided that the Copyright Act 1968 did not extend to cover computer programs as "literary works". On appeal to the Full Court of the Federal Court, judgement was delivered on 29 May 1984. The Court was unanimous that the source program form of computer software constituted a "literary work" entitled to copyright protection. By majority, the Court decided that programs in object code were translations and therefore adaptations of the original literary work, the program expressed in source form.

An appeal has been made to the High Court on the copyright issue and on other grounds associated with a finding of misleading and deceptive conduct within the meaning of s.52 of the Trade Practices Act 1974.

The decision at first instance on the copyright issue led to some concern in the computing industry. A press release issued by the Attorney-General indicated that legislation was contemplated and that short term provision might be made pending further consideration.[1]

A symposium on copyright protection for computer software was conducted by the Attorney-General's Department on 16 March 1984. The symposium was attended by representatives of the Australian computer industry, educational institutions and the microcomputer user community. The industry favoured legislation to provide copyright protection for computer software.[2]

The issue of legal protection for computer software has been given attention in a number of countries in recent years. In addition to private remedies based on a contract with the purchaser or actions for breach of confidence by former employees, the more general application given by copyright or patent procedures have been discussed. The Model Provisions of the World Intellectual Property Organization released in 1978, incorporate features of both copyright and patent law. The rights given to the software proprietor are more extensive and more specific than under copyright provisions. The period of their continuance (20 years from first use or sale) is similar to patent law.[3]
Main Provisions

The Bill would commence with Royal Assent and amends the Copyright Act 1968. Transitional provisions in clause 7 prevent its application to acts done prior to the Bill's commencement, or to copies earlier made or imported which the Bill would otherwise deem infringing copies.

The Bill defines "computer program" in terms, irrespective of the language of its expression, of its function in relation to a digital device whether or not conversion or reproduction in a different "material form" (also defined) is required.

Clause 3 amends section 10 of the Copyright Act for the term "literary work" to include computer programs. "Adaptation" is also defined to include, in relation to computer programs, versions of the work in a different "language, code or notation". The final step is the definition of "infringing copy" to include reproductions of an adaptation of the work.

Clause 4 introduces a new section 43A to permit the owner of a copy of the program to make a backup copy, a procedure employed to ensure against equipment failure or malfunction which might corrupt the copy in use.

Clause 5 provides that transmission through "downline loading" (copying software electronically rather than by transporting a physical copy) over telecommunications lines may be deemed "distribution" of an infringing copy.

Clause 6 introduces a new section 133A prohibiting advertising for the supply of infringing copies of computer programs.

Remarks

In terms of the Apple case, the source language form of the program, in which it is written by the software creator, is a "literary work", its compiled form of abbreviated numeric "object codes" is an "adaptation", and a reproduction of the adaptation, e.g. a copy of the Apple ROM codes, is an "infringing copy".

Software purchasers generally buy the object code, relying upon the associated documentation to explain the behaviour of this usable but unintelligible form. Source code, essential for the operation of any program to be modified, understood, predicted or intelligibly stated, is normally kept by the software creator for maintenance,
improvement or malfunction correction purposes. When the software reaches what is regarded as a "stable" state the source code may, as in the Apple case itself, be destroyed.

For further information, if required, contact:

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References


