--- copyright proprietary *vs* copyleft anti-proprietary

. --- 1976 1985
1988

(1)

1951
1950

1976 1985 1988

1995

1970

proprietary [1]

Public Domain Software
proprietary
[2]

- (2) Vol.44 No.4 (April 2003) p.399
IBM OS (public domain)
PCM(plug compatible machine;)

1979 9 IBM OS 1981 10 3081K 370-XA OS MVS/XA
OS (public domain) PCM
OS PCM

PC
IBM PCM

(2)

1980 [3]

1980 12

1909
1964
1976

---

[1]

[2] , , × H × L ×
(2000) —— InterCommunication No.33

[3] (1986) --- IBM
1986 10 20 ,p. 1980 IBM 10

1976

1975 1978 The National Commission on New Technological Uses of Copyrighted Works (CONTU) 1978 7 31 *Final Report of the National Commission on New Technological Uses of Copyrighted Works*, CONTU,1979 3 (http://digital-law-online.info/CONTU/contu4.html 1980 12

1976

(3)

1973

1977

10

1973 48 (the Committee to Consider the Law on Copyright and Designs) 1976 Whitford Committee Report Copyright and designs law: report of the Committee to consider the law of copyright and designs , H.M.S.O., 1976,xiv+272pp

1
2
3
4

1981 7 Whitford Committee Report Green Paper "Reform of the Law Relating to Copyright, Designs and Performers' Protection"[4] Whitford Committee Report

1
2
3

4

[4] http://www.bopcris.ac.uk/bopall/ref17910.html

(4) WIPO TRIPS

WIPO(World Intellectual Property Organization,)

1976 [5] 1983 [6] 1978

WIPO (1978) *Model Provisions on the Protection of Computer Software*

1995 1 1

Agreement on Trade Related Aspects of Intellectual Property Rights,

[7] *Article 10 Computer Programs and Compilations of Data*[8]

Article 10

(literary works)

1. **Computer programs, whether in source or object code, shall be protected as literary works under the Berne Convention (1971)**.
2. Compilations of data or other material, whether in machine readable or other form, which by reason of the selection or arrangement of their contents constitute intellectual creations shall be protected as such. Such protection, which shall not extend to the data or material itself, shall be without prejudice to any copyright subsisting in the data or material itself.

proprietary

[5] *Draft Agreement for the Protection of Computer Software and its International Deposit*, WIPO Document AGCP/NGO/III/3, April 7, 1976

[6] *Draft Treaty for the Protection of Computer Software*, WIPO Document LPSC/II/6, June 17, 1983

[7] TRIPS 1994 (GATT Uruguay Round) Agreement Establishing the World Trade Organization WTO Annex 1C ( ) WTO

WTO legal texts (http://www.wto.org/english/docs_e/legal_e/legal_e.htm) The Uruguay Round agreements TRIPS http://www.wto.org/english/docs_e/legal_e/27-trips.pdf

[8] The Uruguay Round agreements,p.324 http://www.wto.org/english/docs_e/legal_e/27-trips.pdf p.6

. vs

(Stallman,1999;53)

(1)

(Bill Gates)

1976 BASIC

2

(Gates,1976)

[ ]

1. Gates, B. (1976) “An Open Letter to Hobbyists”, *Computer Notes*, MITS [http://www.blinkenlights.com/classiccmp/gateswhine.html]

(2)

(,2003:24)

(1960)

70

(,2000)

[ ]

1. (2003) 2003 11 , BP ,pp.24-25

2. (2000) —— InterCommunication No.33,pp.166-176,http://www.ntticc.or.jp/pub/ic_mag/ic033/html/171.html

. PDS Free Software/Open Source Software/Creative Commons

a. Creative Commons Free Software Movement Lawrence Lessig — Creative Commons Free Software Movement "proprietary culture"

> “Like the Free Software Movement, we believed this device would help open a space for creativity freed of much of the burden of copyright law. **But unlike the Free Software Movement, our aim was not to eliminate "proprietary culture" as at least some in the Free Software Movement would like to eliminate proprietary software.** Instead, we believed that by building a buttress of free culture (meaning culture that can be used freely at least for some important purposes), we could resist the trends that push the other way.”
>
> Lessig, L. (2005) “CC in Review: Lawrence Lessig on How it All Began”, Submitted by Lawrence Lessig on 2005-10-12 03:15 PM., http://creativecommons.org/weblog/entry/5668/

b. (2004) / FLOSS-JP http://oss.mri.co.jp/floss-jp/report.html /

(2004) /
FLOSS-JP http://oss.mri.co.jp/floss-jp/report.html

14 (Q1)

	43.7%
	26.7%
	29.6%

48.0% 32.6%
31.4% 31.5%

( )

.

(1)

a. (1984) 6 1 III-1

http://www.cric.or.jp/houkoku/s59_1/s59_1.html

1

1909 1964

39 1975 50

the National Commission on New Technological Uses of Copyrighted Works.

CONTU

1976 51 1978 53

1 literary works

101 2 101

3

117

1978 53 CONTU

1980 55 12 CONTU

1981 56 1 117

2 101 3

117

1982 57

1 WIPO

1

1973 48 1977 52

1

2

3 4

1981 56

1

2

3

4

2

3

b. (1994) —
— 6 5
http://www.cric.or.jp/houkoku/h6_5/h6_5.html

1
1
2
3
4

2
1
2

3
1
2
3
4

- 1991 5 14
-
-
-
-
-
-
-
-
- TRIPS
- WIPO

c. Halbersztadt, Józef (2001) “Remarks on the Patentability of Computer Software – History, Status, Developments"
http://swpat.ffii.org/penmi/2001/linuxtag/jh/index.en.html

(2)

a. CONTU (1978) The CONTU Final Report

http://digital-law-online.info/CONTU/PDF/index.html

The National Commission on New Technological Uses of Copyrighted Works (CONTU) was established by Congress, and operated between 1975 and 1978 to determine how the Copyright Act of 1976 should address computers and copy machines. On July 31, 1978, it issued its Final Report, which is frequently cited, but not readily available.

CONTU National Commission on New Technological Uses of Copyrighted Works

CONTU (Congress) 1976
1975 1978 1978 7
31
http://digital-law-online.info/CONTU/PDF/index.html PDF

b. Apple Computer, Inc. Franklin Computer Corporation No. 82-1582

http://www.venus.dtinet.ip/~inoue-m/cr_830830Apple.htm#%82T%81D

[

***Apple Computer, Inc. v. Franklin Computer Corporation*, U.S. Court of Appeals Third Circuit, August 30, 1983, 714 F.2d 1240, 219 USPQ 113**

http://digital-law-online.info/cases/219PQ113.htm

IV. Discussion

A. Copyrightability of a Computer Program Expressed in Object Code

Certain statements by the district court suggest that **programs expressed in object** <219 USPQ 119><714 F.2d 1247> **code**, as distinguished from source code, **may not be the proper subject of copyright**. We find no basis in the statute for any such concern. Furthermore, our decision in Williams Electronics, Inc. v. Artic International, Inc., supra, laid to rest many of the doubts expressed by the district court.

In 1976, after considerable study, Congress enacted a new copyright law to replace that which had governed since 1909. Act of October 19, 1976, Pub. L. No. 94-553, 90 Stat. 2541 (codified at 17 U.S.C. §§101 et seq.). Under the law, two primary requirements must be satisfied in order for a work to constitute copyrightable subject matter – it must be an "original wor[k] of authorship" and must be "fixed in [a] tangible medium of expression." 17 U.S.C. §102(a). The statute provides:

> (a) Copyright protection subsists, in accordance with this title, in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.

Id. The statute enumerates seven categories under "works of authorship" including "literary works", defined as follows:

> "Literary works" are works, other than audiovisual works, expressed in words, numbers, or other verbal or numerical symbols or indicia, regardless of the nature of the material objects, such as books, periodicals, manuscripts, phonorecords, film, tapes, disks, or cards, in which they are embodied.

17 U.S.C. §101. 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.

Id.

Although section 102(a) does not expressly list computer programs as works of authorship, the legislative history suggests that programs were considered copyrightable as literary works. See H.R. Rep. No. 1476, 94th Cong., 2d Sess. 54, reprinted in 1976 U.S. Code Cong. & Ad. News 5659, 5667 ("literary works' * * * includes * * * computer programs"). Because a Commission on New Technological Uses ("CONTU") had been created by Congress to study, inter alia, computer uses of copyrighted works, Pub. L. No. 93-573, §201, 88 Stat. 1873 (1974), Congress enacted a status quo provision, section 117, in the 1976 Act concerning such computer uses pending the CONTU report and recommendations.[6]

The CONTU Final Report recommended that the copyright law be amended, inter alia, "to make it explicit that computer programs, to the extent that they embody an author's original creation, are proper subject matter of copyright." National Commission on New Technological Uses of Copyrighted Works, Final Report 1 (1979) [hereinafter CONTU Report]. CONTU recommended two changes relevant here: that section 117, the status quo provision, be repealed and replaced with a section limiting exclusive rights in computer programs so as "to ensure that rightful possessors of copies of computer programs may use or adapt these copies for their use," id.; and that a definition of computer program be added to section 101. Id. at 12. Congress adopted both changes. Act of Dec. 12, 1980, Pub. L. No. 96-517, §10, 94 Stat. 3015, 3028. The revisions embodied CONTU's recommendations to clarify the law of copyright of computer software. H.R. Rep. No. 1307, 96th Cong., 2d Sess. 23, reprinted in 1980 U.S. Code Cong. & Ad. News 6460, 6482.

The 1980 amendments added a definition of a computer program: <714 F.2d 1248>

A "computer program" is a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result.

17 U.S.C. §101. The amendments also substituted a new section 117 which provides that "it is not an infringement for the owner of a copy of a computer program to make or authorize the making of another copy or adaptation of that computer program" when necessary to "the utilization of the computer program" or "for archival purposes only." 17 U.S.C. §117. The parties agree that this section is not implicated in the instant law <219 USPQ 120> suit. The language of the provision, however, by carving out an exception to the normal proscriptions against copying, clearly indicates that programs are copyrightable and are otherwise afforded copyright protection.

We considered the issue of copyright protection for a computer program in Williams Electronics, Inc. v. Artic International, Inc., and concluded that "the copyrightability of computer programs is firmly established after the 1980 amendment to the Copyright Act." 685 F.2d at 875, 215 USPQ at 409. At issue in Williams were not only two audiovisual copyrights to the "attract" and "play" modes of a video game, but also the computer program which was expressed in object code embodied in ROM and which controlled the sights and sounds of the game. Defendant there had argued "that when the issue is the copyright on a computer program, a distinction must be drawn between the 'source code' version of a computer program, which * * * can be afforded copyright protection, and the 'object code' stage, which * * * cannot be so protected," an argument we rejected. Id. at 876, 215 USPQ at 409.

c. 3

http://www.kcg.ac.jp/acm/a3048.html

(3)

a. Great Britain. Committee to Consider the Law on Copyright and Designs (1977) Copyright and Desig n Law: Report of the Committee to Consider the Law on Copyright and Designs, H.M.S.O.

The Whitford Committee Report

H.M.S.O. Her Majesty's Stationery Office 1996 10 The Stationery Office Ltd [(1998) HMSO No.229]

Presented to Parliament by the Secretary of State for Trade by Command of Her Majesty, March 1977.

Bibliography: pp. 255-256.

b. Dworkin, Gerald (1977) "The Whitford Committee Report on Copyright and Designs Law," *The Moder n Law Review*, Vol. 40, No. 6 (Nov., 1977), pp. 685-700

http://www.jstor.org/stable/1094917

This is the first of two articles that study the complex interactions of the different branches of intellectual property law that seek to regulate the degree of protection to be accorded ornamental designs of useful articles.

c. Hui-Ming Liew, Andre Sean Sequerah (1995) "Programmers and The Law Final Report" 13 June 199 5

http://www.doc.ic.ac.uk/~nd/surprise_95/journal/vol4/hml/report.html

As software was increasingly distributed without signed license agreements, copyrights became to be considered the most suitable form of legal protection. Copyrights came into immediate effect the moment that a program was written and was suited for products that were mass-distributed as in the publishing industry. Furthermore, copyright provided a ready legal framework that could be adapted to the new technology. **The history of the law was its development to encompass new types of works besides books such as engravings and choreography. The Whitford Report of 1978[6] commissioned by the Secretary of State for Trade in the United Kingdom came to the conclusion that there was a need for a clear and effective way to protect computer programs from being copied. The use of copyright was suggested as a solution because literary and artistic works, which copyright protected, provided a sufficiently wide definition to cover computer programs**. **In the United Kingdom, the formal acceptance of copyright as the prime form of legal protection for software came with the enactment of the Copyright, Design and Patent Act of 1988 which defined "literary work" to include a computer program.** At the European Community level, the EC Software Directive (1993) gave computer programs protection "by copyright as literary works within the meaning of Berne." **In the US, an amendment to the federal Copyright Act of 1976 provided for the protection of computer programs, which, as a federal Court of Appeals pointed out recently, was considered literary works. [7]**

The use of copyright, though, has presented many problems for the software industry. The first generation of software issues has already been solved. Both source and object code have copyright protection. The second generation of issues are now being contested in the courts. Cases such as "Apple vs. Microsoft" have raised questions on the copyrightability of the "look and feel" concept. While it has always been acknowledged that copyright only protects the expression of an idea and not the underlying idea itself, recent cases, both in the US and UK show that there have been problems defining the line between idea and expression of the idea. The question of interoperability linked to the issue of reverse engineering also poses real difficulties to the implementation of copyrights.

d. Lai, Stanley (1999) The Copyright Protection of Computer Software in the United Kingdom, Hart Pub

http://books.google.co.jp/books?id=ZpR-CAFuYtgC&lpg=PA129&ots=lIKflIbK4o&dq=%22Report%20of%20the%20Committee%20to%20Consider%20the%20Law%20on%20Copyright%20and%20Designs%22&pg=PR5#v=onepage&q=%22Report%20of%20the%20Committee%20to%20Consider%20the%20Law%20on%20Copyright%20and%20Designs%22&f=false

This work analyses the scope of copyright protection for computer software in the United Kingdom, and examines challenges for the future. The work presents the case for the adoption and application of infringement methodology emanating from the courts in the United States, resulting in a narrower scope of protection than is presently argued for by many UK academics, practitioners and judges alike. The work makes a careful evaluation of the efficacy of the various

prevailing tests for infringement of copyright in software and their progenies, suggesting an improved formula and advocating the utility of limiting doctrines to assist in the determination of substantial similarity of particular non-literal software elements, user interfaces and screen display protection. The monograph also contains a detailed study of reverse engineering, copyright defences, permitted acts, database protection and the copyright-contract interface in the context of computer software, not omitting crucial discussions of the internet, digital dissemination and the impact of recent treaty and legislative initiatives on British copyright law. As such it will be an important resource for practitioners, lecturers and students alike.

p.36
Another significant decision is *Bateman v Mnemonics*. (179) **The plaintiffs developed computer hardware and an operating system for a single board computer for use in automated parking systems.** It instituted proceedings against the defendant, who reverse engineered the plaintiff's software and hardware to develop its own single board computer. At trial the jury returned a verdict for the plaintiffs. One of the issues on appeal was the jury instruction pertaining to the *Altai* test; specifically the following words:

> "substantial similarity of the *non literal elements* is determined by comparing with the defendant's program, that protectable expression of the copyrighted work which remains after filtering out any portion of the copyrighted work, which represents only ideas, elements dictated solely by logic and efficiency, elements dictated by hardware or software standards, computer industry programming and practices or elements which are taken from the public domain"(180) (emphasis added).

The defendant objected to the above instructions being limited to apply the filtration step only to the non-literal elements of computer programs. The Court observed that whilst other circuits disagreed on whether the *Altai* test should only be limited to the non-literal copying or whether it was equally applicable to the literal copying cases, (181) the Court saw this disagreement as being more a matter of semantics than of substance, (182) taking the view that challenges to the copying of literal elements also had to be considered, whether as part of the *Altai* filtration process, (183) or as a separate parallel analysis. Since the jury instructions implied that the *Altai* filtration step was limited only to the nonliteral copying, the jury must have concluded that any instances of literal copying of Bateman's code by the defendant were by definition acts of copyright infringement. According to the Court, "this conclusion is a manifest distortion and misstatement of the law".(184) This is an extreme application of *Altai,* and arguably has limited relevance for the United Kingdom, **save for user interface protection.**

p.117
Even though the Ninth Circuit in Sega emphasized disassembly for the purpose of acquiring information for promoting software-hardware (key-lock) compatibility, it did not only limit the scope of fair use to this context. As stated by the Court:

> "The need to disassemble object code arises, if at all, only in connection with operations systems, system interface procedures, and other programs that are not visible to the user when operating-and then only when nun alternative means of gaming an understanding of the ideas and functional concepts exists"(157)

(4) WIPO

a. WIPO(1971) "Advisory Group of Governmental Experts on the Protection of Computer Programs (Geneva, March 8-12, 1971)", *Copyright*, March 1971, pp. 35-40

Copyright WIPO (monthly bulletin)

This is the first international document I know, which discusses the desirability of software copyright and patents

http://www.valimaki.com/org/software_copyright.html

> first, the main question of the whole thing was to answer "(i) What form of legal protection of computer programs at the national level is most appropriate both from the point of view of the *developing countries* and from that of the producers of software" (italics added). Two others on the term of protection: "The Expert of the Soviet Union ... from 5 to 10 years would be a reasonable perior for computer programs..." and "The Expert of the United States of America ... different terms of protection subject to different conditions, and could include the possibility of renewal of the period".

b. WIPO(1978) "Model Provisions on the Protection of Computer Software," Copyright, January 1978, pp.6-19

WIPO = the World Intellectual Property Organization

http://www.valimaki.com/org/docs/wipo_model_law.pdf

WIPO then drafted model law provisions that "essentially adopt a copyright law approach" with some interesting departures from a direct application of copyright. For example, "countries interested in the model provisions might like to consider a ... system for the deposit or registration of computer software". Further, the provisions state that the "rights under this Law shall in no case extend beyond 25 years from the time when the cmputer software was created".

http://www.valimaki.com/org/software_copyright.html

c. Group of Experts on the Legal Protection of Computer Software (Geneva, June 13 to 17, 1983), *Copyright*, September 1983, pp. 271-279

http://www.valimaki.com/org/docs/wipo_experts_1983.pdf

After the model law WIPO continued to the direction of a "sui generis" or special kind of intellectual propertion of computer programs. They drafted a new treaty proposal (see below) that would have dealt with software. In a meeting of experts, however, the proposal ddin't get much support. A committee turned the proposal down by concluding that it was "premature to take, for the time being, a stand on the question of the best form for the international protection of computer software". As an anecdote, Finland was quite alone in its statement that "in a recent meeting of interested circles in Finland ... there was a trend in favor of a *sui generis* approach." The committee also turned down the idea of registration system saying that "the study of establishing such a deposit, at least at an international level, should not be pursued at this time".

d. Draft Treaty for the Protection of Computer Software (Geneva, June 13 to 17, 1983) [Thanks to Juka Liedes for locating the draft treaty; all markings are from Liedes' original document]

http://www.valimaki.com/org/docs/wipo_draft_treaty_1983.pdf

This is the draft treaty discussed in the above meeting. The most interesting article is number 4: it combines elements from trade secret law [sections (i) and (ii)], copyright law [sections (iii) to (v), (vii) and (viii)] and patent law [section (vi)]. As such, it would have given extremely strong protection for software developers - there are no exceptions to the proposed exclusive rights! Duration? 20 years, for sure.

e. Group of Experts on the Copyright Aspects of the Protection of Computer Software (Geneva, February 25 to March 1, 1985), *Copyright*, April 1985, pp. 146-149

http://www.valimaki.com/org/docs/wipo_experts_1985.pdf

In the mid 1980s, the fight concerning the right way to protect software seemed to be over: "a great number of participants developed arguments in favor of recognizing copyright protection of computer programs; patentability of computer programs *per se* had been ruled out under the law of virtually every country ... copyright, in its development, had proved to be flexible enough to extend to works of technical nature...". So patents were out; special kind of intellectual property protection didn't get much favorable opinions either. The discussion on the optimal term continued. Interestingly, "one delegation proposed to consider the application of Article 7(4) of the Berne Convention to computer programs. That Article made it a matter for national legislation to provide for a period of protection - not less than 25 years from the making of the work - as regards works of applied art."

(5) (2001) 2001 1 5

2 [1] (5)

http://www.jpo.go.jp/shiryou/toushin/nenji/nenpou2001_index.htm

http://www.jpo.go.jp/shiryou/toushin/nenji/nenpou2001_pdf/2-5-2.pdf

.

(1) Stallman, R. (1999) “The GNU Operating System and the Free Software Movement”, *OPENSOURCES: Voices from the Open Source Revolution,* O'Reilly & Associates, Inc.

(, , 1999)

http://biblioweb.sindominio.net/telematica/open-sources-html/node42.html http://www.oreilly.co.jp/BOOK/osp/OpenSource_Web_Version/chapter05/chapter05.html WEB

(2) , , × H × L ×

(2000) —— InterCommunication No.33,pp.166-176

http://www.nttic.or.jp/pub/ic_mag/ic033/html/166.html

70

(3) ---- Linux

http://tadhomma.ld.infoseek.co.jp/SubIndxIntRev.htm#

2003 2 27

Linux

(4) --- preserving the intellectual property rights that sustain a strong software business.( )

OSS

Shared Sourece Initiative

2002 2 21 Microsoft (2002) “Microsoft Announces Major Expansion of Shared Source Initiative, Providing Source Code to Systems Integrators” Feb. 21, 2002, http://www.microsoft.com/en-us/news/press/2002/feb02/02-21sharedsourcepr.aspx

a. Shared Source Initiative

About the Shared Source Initiative

The Microsoft Shared Source Initiative is a balanced approach that makes source code more broadly available while preserving the intellectual property rights that sustain a strong software business. The Shared Source Initiative framework supports a spectrum of programs and licenses offered by Microsoft to various communities of customers, partners, developers, academicians and other interested individuals.

Each source-licensing program under the Shared Source Initiative is tailored to the specific needs of a particular Microsoft constituent community, and can be applied as a model for increasing code transparency throughout commercial software. **Shared Source is an evolving framework that will support additional source-code access programs** and licenses involving many Microsoft product groups. Currently, Windows 2000, Windows XP, Windows .NET Server, Windows CE 3.0 and Windows