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CASE NOTES

Computer Associates v. Altai and *Apple v. Microsoft*: Two Steps Back From *Whelan*?
Computer Associates International, Inc. v. Altai, Inc., 23
U.S.P.Q.2d (BNA) 1241, (2d Cir. 1992). *Apple Computer, Inc. v. Microsoft Corp.*, 799 F.Supp. 1006, (N.D. Cal. 1992).

Audrey F. Dickey*

In 1986, the Third Circuit, in *Whelan Associates v. Jaslow Dental Laboratory*,[1] defined a test for copyright infringement of computer programs that went beyond simply looking for literal copying of the elements. The court laid the foundation for what has become known as the "look and feel" analysis to determine substantial similarity by comparing not only the literal elements, but the sequence, structure and organization of a program. Since *Whelan*, many courts have used a similar analysis for determining copyright infringement of software, but in the summer of 1992, two cases were decided that may mark the beginning of a retreat from the "look and feel" doctrine, and may have a significant impact on the future of computer program copyright actions. These cases are *Computer Associates International, Inc. v. Altai, Inc.*,[2] a Second Circuit case, and *Apple Computer, Inc. v. Microsoft Corp.*[3] from the Northern District of California.[4] Both cases criticized the approach in *Whelan* and bring forth the question as to whether similarity in structure will continue to be sufficient to show copyright infringement in computer software.

The courts began their analysis in both cases by looking at the two elements needed to show infringement, access and substantial similarity. In both cases, access was available and so the question hinged on whether there was substantial similarity. In neither case

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1. 787 F.2d 1222.
2. 23 U.S.P.Q. (BNA) 1241 (2d Cir. 1992).
3. 799 F.Supp. 1006 (N.D. Cal. 1992).
4. Coincidentally, both decisions were written by a Judge Walker. John M. Walker, Jr. in the Computer Associates case, and Vaughn Walker in Apple v. Microsoft.

was there literal copying of the elements. Although the analyses used by the two judges appeared to be different, there were fundamental similarities in the treatment of the programs, looking at them not as whole works, but at their component parts to determine similarity. The results were also similar. In *Computer Associates*, no infringement was found. In *Apple v. Microsoft*, summary judgment was granted on 300 out of 304 alleged violations, with only four elements found to be possible protected expression.

The facts of *Computer Associates* were outlined in the District court decision.[5] Computer Associates (CA) wrote a job-scheduling program called CA-Scheduler for the IBM System 370 family of computers. IBM sells three different operating systems for this family, and software developers who want their programs to run on all three must usually write three different versions in order to be consistent with whatever operating system the customer might choose. To avoid the burden of writing three versions of CA-SCHEDULER, CA wrote one version, consisting of two parts. One part, called SCHEDULER, performed the actual job scheduling functions. When it needed to communicate with the operating system, it passed control to the second part, ADAPTER. ADAPTER provided the proper interface between SCHEDULER and the operating system and was able to communicate with any of the three operating systems, translating the commands from SCHEDULER to the proper format for the operating system in use. ADAPTER was used not only in CA-SCHEDULER, but in other programs written by CA. ADAPTER was not sold separately.

Altai attempted to market a program similar to CA-SCHEDULER, but Altai's version was not as versatile. Their first attempt, called ZEKE, did not have the equivalent of an ADAPTER module, but was only able to run on one IBM operating system. Subsequently, Altai developed Oscar, their version of ADAPTER. The first version of OSCAR, OSCAR 3.4, was written by a former employee of CA and, it was later discovered, contained much code that was copied directly from ADAPTER. Once it was revealed to Altai's management that OSCAR was a possible infringement on CA's program, they began efforts to rewrite OSCAR in order to eliminate all of the copied code. It is this second version of OSCAR, OSCAR 3.5, that is in question in this case. The argument hinged on whether Altai's OSCAR 3.5 was substantially similar to CA's program. CA claimed that despite the rewrite of OSCAR, it was still substantially the same as ADAPTER. In the

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5. Computer Associates Int'l. v. Altai, Inc., 775 F.Supp. 544, 549-53 (E.D.N.Y. 1991).

decision, the court agreed with *Whelan* that copyright infringement can go beyond just literal copying.[6] But the court went on to say that this did not end the analysis. Rather, the next step was to determine the extent of the protection for non-literal structure.

Judge Walker then discussed the problem inherent in the idea-expression dichotomy and the even greater difficulty in separating the two in computer programs. *Whelan* was cited for its attempt to draw the line between idea and expression, but Judge Walker then criticized the *Whelan* concept of a single idea defining a program. In the *Whelan* analysis, once the idea of the program is determined, the program itself provides the expression of that idea. Judge Walker saw this as the fatal flaw in the *Whelan* reasoning, the assumption that only one idea could underlie any computer program. According to Judge Walker, a program can contain many sub-programs, each with its own idea.[7] Judge Walker then explained the Second Circuit approach to determining substantial similarity, the Abstraction-Filtration-Comparison test. This is a three-part test that starts with the abstractions test first expounded by Learned Hand in *Nichols v. Universal Pictures*.[8] The program is broken down into levels of abstraction from the most complex, a collection of instructions, to the simplest, the ultimate function of the program. After the levels are identified, then the filtering test takes place. Each component at each level is examined to determine whether or not the component is protectible expression. It could be that the module contains an idea rather than expression. If the module is expression, that expression may be dictated by considerations of efficiency, required by factors external to the program, or taken from the public domain. Any of these reasons would cause that component to be non-protectible.

Once the elements deemed non-protectible in the filtration process have been sifted out, the remainder represents the "core of protected expression."[9] At this point, the court must determine if the defendant copied any aspect of this expression. But another part of the analysis focuses on the copied portion's relative importance to the overall program. Thus, even if substantial similarity is found, it may be that the similar piece is determined to be of such relatively little importance to the overall work that no infringement would be found. Judge Walker defended his approach as one that "not only

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6. *Computer Associates*, 23 U.S.P.Q. (BNA) 1241, 1249.

7. *Id.* at 1252.

8. 45 F.2d 119 (2nd Cir. 1930).

9. *Computer Associates*, 23 U.S.P.Q. (BNA) 1241, 1256.

comports with, but advances the constitutional policies underlying the copyright act."[10] He emphasized that the primary objective of the copyright law is to stimulate creativity, not reward authors. He criticized the *Whelan* rationale as too sweeping because it allows the first to implement certain techniques to put a "lock" on them, resulting in an inhibition of creation. He also stated his belief that copyright is not the most suitable method of protection for computer software and that the result of the decision in this case flowed from Congressional intent, rather than the most effective way to protect computer software.[11]

In applying his test to the instant case, Judge Walker looked at each level of abstraction in the alleged infringed program, ADAPTER. The levels of abstraction that he found were object code, source code, parameter lists and macros, services required, and the general outline. At the code levels, he found no similarity at all, since the code had been rewritten to remove the identical code. On the level of parameter lists and macros, there were elements that were similar to protected elements, but they were deemed insignificant compared to the overall program. The list of services required were found to be determined by the demands of the operating system, and the organizational charts were considered to be simple and obvious, following naturally from the work's theme.[12] Thus, no infringement was found.

Apple's suit against Microsoft and Hewlett-Packard (HP) involved the immensely successful Windows software by Microsoft, which sits on the DOS[13] operating system and extends its visual and graphical capabilities. Apple also uses a graphical interface for its Macintosh line of computers. In 1985, in an attempt to put to rest arguments as to whether Windows infringed on Apple's copyright for its Macintosh operating system, Apple granted to Microsoft a non-exclusive license for the audiovisual displays in the first version of Windows, Windows 1.0. In turn, Microsoft had given HP a license for some of the displays used in Windows that HP had incorporated into their software called NewWave. However, these licenses covered only the displays found in Windows 1.0 and did not cover those that first appeared in a subsequent release, Windows 2.03. Apple filed suit against Microsoft and HP for infringing on

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10. *Id.*
11. *Id.* at 1257.
12. *Id.* at 1260.
13. This is a Microsoft trademarked acronym for Disc Operating System.

those copyrights of elements not covered by the 1985 agreement.[14] Apple attempted to base its suit on the similarity of the overall look of Windows and NewWave to the Apple Macintosh graphical interface which Apple later described as a "desk-top metaphor."[15] In 1985, the court did not accept Apple's "look and feel" argument and requested that Apple submit a list of the alleged similarities between the Macintosh displays the Windows and NewWave. Apple's list contained 189 alleged similarities between the Apple works and Windows and 147 similarities between the Apple displays and NewWave.[16] Microsoft and HP filed motions for summary judgment, claiming no infringement on a variety of grounds. The court determined that 179 of the similarities claimed in Windows[17] and 135 in NewWave[18] were covered by the 1985 license. A subsequent decision determined that the ten remaining items relating to Windows and 53 out 54 of the NewWave items were subject to little or no copyright protection and summary judgment was granted to Microsoft and HP on those 63 items.[19] Apple moved for reconsideration and this decision is the result of that reconsideration. In this case, Judge Walker used the two-part test of the Ninth Circuit for determining copyright infringement. This test starts with an extrinsic, or objective, analysis of the work using expert testimony to determine criteria for comparison.[20] During this stage of the analysis not only is similarity of ideas determined, but the elements that can be protected by copyright must be identified. This is similar to the filtering step used by Judge John Walker in the *Computer Associates* decision. Once the protectible elements are determined, an "intrinsic test" or "subjective analysis of expression"[21] is used. This part of the test is performed not by the court, but by the trier of fact. However, should the extrinsic analysis result in no protectible elements of the work, then the intrinsic test is unnecessary and summary judgment is appropriate.[22]

Judge Walker then went on to describe the doctrines that would cause an element to be deemed unprotectible, that is, merger,

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14. Apple Computer, Inc. v. Microsoft Corp., 709 F.Supp. 925, 930 (N.D. Cal. 1989).

15. Apple Computer, Inc. v. Microsoft Corp., 799 F.Supp. 1006 (N.D. Cal. 1992).

16. *Id.* at 1016.

17. Apple Computer, Inc. v. Microsoft Corp., 717 F.Supp. 1428 (N.D. Cal. 1989).

18. Apple Computer, Inc. v. Microsoft Corp., 759 F.Supp. 1444 (N.D. Cal. 1991).

19. Apple Computer, Inc. v. Microsoft Corp., 1992 WL 75423 (N.D. Cal. 1992). ·

20. *See* Sid & Marty Krofft Television v. McDonald's Corp., 562 F.2d 1157, 1164 (9th Cir. 1977); Shaw v. Lindheim, 919 F.2d 1353, 1357 (9th Cir. 1990).

21. *Shaw,* 919 F.2d at 1357.

22. Apple Computer, Inc. v. Microsoft Corp., 799 F.Supp. 1006, 1020 (N.D. Cal. 1992).

indispensable expression (scenes a faire), idea rather than expression, and lack of originality. According to Judge Walker, courts have developed these limiting doctrines as a response to the problem of balancing between the revenue and cost effects inherent in copyright protection. Although copyright affords an incentive to authors by allowing them to recoup their investment in creativity, it also increases the costs of creation by keeping that creative work the exclusive property of one author.[23]

Apple argued that in order to understand the appearance of the Macintosh interface one must look not only at the individual elements, but the way those elements interact with one another. Thus, the "look and feel" doctrine could be used to compare the overall appearance of the Macintosh with Windows and NewWave. However, Judge Walker rejected this argument, saying that the desktop metaphor was not the idea unifying the expressive elements, but rather merely "a collection of visual displays and user commands designed to render use of the computer . . . more utilitarian."[24] He saw the elements as performing a purely functional purpose, and likened the display and commands to the various parts of an automobile. No copyright protection is available for utilitarian articles.[25]

The court then went on to criticize the *Whelan* court for its formulation that a program's overall purpose constitutes the idea and that the program itself is the expression of that idea. According to the law of the Ninth Circuit, a program can contain many ideas. Judge Walker also pointed to the 1985 agreement as proof that Apple and Microsoft accepted the individual displays as the protectible expression, not the totality of the programs.[26] Having explained his approach to the problem, Judge Walker then proceeded to analyze each of the displays in question. He had granted summary judgment to Microsoft on its claims of non-infringement for all ten remaining items in his previous decision. In this reconsideration, he affirmed his previous decision on all items. Previously HP was granted summary judgment for all but one claim, the trash can icon.

In the instant decision, Judge Walker reconsidered and changed his decision of three items dealing with the appearance of icons as windows are opening and closing, as well as reaffirming the

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23. *Id.* at 1021.
24. *Id.* at 1023.
25. *Id.*
26. *Id.* at 1025.

protectibility of the trash can icon.[27] In determining the protectibility or non-protectibility of the elements in question, Judge Walker used the limiting doctrines mentioned above. Microsoft and HP were able to show that before and during the development of Lisa, the predecessor to the Macintosh, the Apple development engineers were exposed to other graphical interface systems, and that Apple incorporated into their products some of the ideas that they obtained from observing these other systems. The defendants also showed that the other graphical user interfaces on the market always incorporate the basic elements of the Macintosh interface. Due to these two arguments, many of the contested elements were found to be non-protectible because of either lack of originality or indispensable expression. In addition, some elements were found to contain not expression but ideas.

In both cases, the courts were critical of the *Whelan* approach which treats a program as the expression of a single idea. The courts in these two decisions also used similar methods of breaking the program down into many elements and "filtering out" non-protectible elements, making a case for "look and feel" much more difficult to support. The role of sequence, structure and organization, the foundation of the "look and feel" doctrine, played little or no part in the analysis by concentrating on the parts rather than the whole.

However, one should not draw a conclusion from these cases that "look and feel" is dead. In each case, unique factors existed that may not be present in other software copyright cases. In *Computer Associates*, the program's function was narrowly defined by the application. Judge John Walker based much of his decision on non-protectibility on the reason that the element was required by factors external to the program. It has been well known in the industry that Apple's development engineers acquired many of their ideas for the Lisa, the forerunner of the Macintosh, from systems that they saw at Xerox. It was not surprising, then, that Judge Vaughn Walker leaned heavily on the limiting doctrine of lack of originality in reaching his decision. Should the next software case contain none of these unique factors, it may be that the decision will heartily support the *Whelan* approach. We will have to wait and see.

Judge John Walker, in discussing the policy considerations leading to his decision, described his dilemma as follows:

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27. *Apple*, 799 F.Supp. at 1042.

> To be frank, the exact contours of copyright protection for non-literal program structure are not completely clear. We trust that as future cases are decided, those limits will become better defined. . . Generally, we think that copyright registration — with its indiscriminating availability — is not ideally suited to deal with the highly dynamic technology of computer science. Thus far, many of the decision in this area reflect the courts' attempt to fit the proverbial square peg in a round hole.[28]

The law of software copyright is constantly changing. These two decisions could be two steps in a totally different direction, or they could be merely a detour along the road we have been following for six years. Only time and the courts will tell.

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28. *Computer Associates*, at 1257.