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**Lotus v. Borland [5]**

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IN THE  
UNITED STATES COURT OF APPEALS  
FOR THE FIRST CIRCUIT

No. 93-2214

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LOTUS DEVELOPMENT CORPORATION,

*Plaintiff/Appellee,*

v.

BORLAND INTERNATIONAL, INC.,

*Defendant/Appellant.*

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APPEAL FROM THE UNITED STATES DISTRICT  
COURT FOR THE DISTRICT OF MASSACHUSETTS  
HONORABLE ROBERT E. KEETON, JUDGE

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BRIEF OF PLAINTIFF/APPELLEE  
LOTUS DEVELOPMENT CORPORATION

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UNITED STATES COURT OF APPEALS  
FOR THE FIRST CIRCUIT

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LOTUS DEVELOPMENT CORPORATION, :

Plaintiff/Appellee, :

Appeal No. 93-2214

-against- :

BORLAND INTERNATIONAL, INC., :

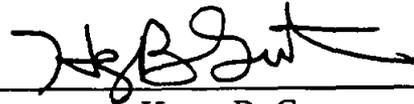
Defendant/Appellant. :

-----X  
CORPORATE DISCLOSURE STATEMENT OF PLAINTIFF/APPELLEE  
LOTUS DEVELOPMENT CORPORATION

Pursuant to Fed. R. App. P. 26.1, Plaintiff/Appellee Lotus Development Corporation, hereby states that it has no parent companies, subsidiaries, or affiliates that have issued shares to the public.

Respectfully submitted,

By: \_\_\_\_\_



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## STATEMENT OF THE CASE

### A. Introduction

The issue on this appeal is whether the District Court (Robert E. Keeton, J.) erred in holding that Borland infringed Lotus' copyrights by deliberately incorporating a virtually identical copy of the Lotus 1-2-3 menu commands and menu tree in Borland's competing products, Quattro and Quattro Pro. The computer program Borland chose to copy, Lotus 1-2-3, is the most popular and successful application program in the history of the personal computer. Its "menus" -- a collection of over 450 commands hierarchically arranged in a "menu tree" containing more than 50 different menus and submenus -- are how Lotus 1-2-3 communicates to its users. Displayed on the computer screen (when a user hits the "/" key), the menus articulate the program's functional capabilities and guide the user through the menu tree to find the operations the user wishes to select. Users, in turn, communicate their choices to the program by typing keystrokes corresponding to the indicated menu commands. It is no exaggeration to say that the 1-2-3 menus represent a short-form users' manual connecting the program to its users, resulting in a form of dialogue between them.<sup>1</sup>

Borland's Quattro and Quattro Pro products were sold with alternate user interfaces, one of which provided what were described as "1-2-3 emulation" menus. That Borland comprehensively copied the Lotus 1-2-3 menus -- word for word and menu by menu -- in these "emulation" menus is not subject to question on this appeal. After two rounds of summary judgment motions and two separate bench trials in the court below, the record allows no room for doubt on this point. Rather, the only question is whether the Lotus 1-2-3 menus comprise a form of expression protected by copyright -- for reasons the District Court has explained in a series of thorough and well-reasoned opinions -- or whether, as Borland contends, they are simply an unprotectable "idea", "system" or "process".

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<sup>1</sup>Copies of representative screen displays, showing certain Lotus 1-2-3 menus and submenus with the corresponding menus and submenus from Quattro and Quattro Pro, are attached hereto as Exhibit A. They are from Volume V, Tab 2, Exhibit A of the trial record, references to which are cited hereinafter in the form "Dkt. No. 359, V:2, Ex. A thereto".

No matter how much Borland pretends otherwise, this copyrightability issue was tried twice below. Borland's display of the 1-2-3 menus in the "1-2-3 emulation" user interfaces of its products was the focus of the Phase I trial. The Phase II trial concerned Borland's use of "phantom", or hidden, 1-2-3 menus in the Key Reader feature added to later versions of its products. In both instances, the District Court ruled upon specific findings of fact that Borland copied elements of expression distinct and separable from the "idea" or "system" underlying the 1-2-3 menus, which it found was capable of a very wide variety of expression. These findings may not be disturbed unless clearly erroneous.

Thus, the only argument available to Borland on this record is, when honestly stated, exceedingly extreme. Borland argues that the Lotus 1-2-3 menus are uncopyrightable as a matter of law -- no matter how expressive and original they may be, and regardless of how many alternatives were available to 1-2-3's creators for devising different menus for a program that would provide precisely the same functional capabilities.

Borland and its amici advance a number of definitional word games and policy arguments in an effort to disguise the extreme nature of Borland's position. We are told that this case is not about copying, but about "compatibility";<sup>2</sup> that the Lotus 1-2-3 menus are not a user interface, but a programming language or an operating system;<sup>3</sup> that the words in menus can only be protected by patent law rather than by copyright;<sup>4</sup> and that the learned court below used a test for determining copyrightability so defective that it would undo a century of copyright law and would even permit copyright protection for buttons, knobs and Ferrari engines.<sup>5</sup>

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<sup>2</sup>See, e.g., Brief of Defendant/Appellant Borland International, Inc. ("Br."), at 50-54.

<sup>3</sup>See, e.g., Amicus Brief of Computer Scientists Re Copyrightability of Computer Languages ("Computer Scientists' Br."), passim; Brief Amicus Curiae of American Committee for Interoperable Systems ("ACIS Br."), at 5-6.

<sup>4</sup>See, e.g., Br. at 48-50; Brief Amicus Curiae of Professor Dennis S. Karjala and Professor Peter S. Menell, at 6-13; ACIS Br. at 17.

<sup>5</sup>See, e.g., Br. at 7, 31.

But no amount of misdirection can obscure what is at stake here. Borland would have this Court hold, as no other court has, that original and expressive elements of a computer program's user interface are not protectable as a matter of law. Borland asks the Court, in effect, to rewrite copyright law to legitimize sophisticated forms of software plagiarism, and to do so for no better reason than because Borland has decided that it will sell more copies of Quattro Pro if the program includes 1-2-3's menus. Neither Borland nor its amici can point to any evidentiary basis in the record suggesting that such an outcome would accomplish any purpose beyond an enrichment of Borland's shareholders at Lotus' expense, or that the robust innovation and competition already prevalent in this flourishing industry will be "stifled" unless new market entrants are permitted to copy substantial expression from their predecessor's works.

As we show below, the holding Borland seeks would substitute this Court's policy judgment for that of Congress, which determined to provide meaningful and effective copyright protection for the creators of innovative computer software and expressed that judgment in the Copyright Act. The District Court has faithfully honored that mandate, applying traditional copyright principles in a careful and intellectually rigorous manner. Borland has failed to demonstrate that the District Court erred in applying those principles. Accordingly, the permanent injunction entered by the District Court should not be vacated.

B. Summary of the Proceedings Below

Borland's description of the procedural history of this case is sufficiently confusing and misleading that we believe it is necessary to set the record straight here.<sup>6</sup> Lotus filed this action on July 2, 1990, alleging that the "1-2-3 emulation" menus in Quattro and Quattro Pro contained "deliberate, command-for-command copies of the [Lotus 1-2-3] user interface, and in particular of [its] menu structure and commands." (Dkt. No. 1 at ¶¶ 1, 17-23,

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<sup>6</sup>References herein to an "Ex." pertain to trial exhibits, unless otherwise indicated. "App." refers to the Appendix to be submitted following the closure of the briefing herein.

App. \_\_\_)<sup>7</sup> Borland filed its answer and jury demand on July 27, 1990. (Dkt. No. 4, App. \_\_\_)

1. Motions for summary judgment.

Following an initial exchange of discovery, including the production to Borland of all discovery materials from the Paperback, Mosaic and SAPC litigation,<sup>8</sup> Lotus moved for summary judgment on liability on May 7, 1991. (Dkt. Nos. 30, 34-37, 147, 149) The District Court granted Borland five months in which to respond and permitted both parties to proceed with further discovery. (Tr. of 6/18/91, at 22-24, App. \_\_\_)<sup>9</sup>

On September 30, 1991, Borland opposed Lotus' motion and cross-moved for summary judgment on copyrightability. (Dkt. Nos. 81-84, 87, 89-90, 93, 95, 141-44) Borland contended that the Lotus 1-2-3 menus were not copyrightable as a matter of law, and that no reasonable trier of fact could find that the similarity between its products and Lotus 1-2-3 were sufficient to sustain a determination of infringement. (Dkt. No. 141 at 32, 151) On March 20, 1992, the District Court denied both motions, concluding that "neither party's motion is

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<sup>7</sup>On June 28, 1990, the District Court issued its decision in Lotus Development Corp. v. Paperback Software Int'l, 740 F. Supp. 37 (1990) (hereinafter "Paperback"), holding after trial that the Lotus 1-2-3 "menu structure, taken as a whole -- including the choice of command terms [and] the structure and order of those terms" were protected expression covered by Lotus' copyrights, which defendants had infringed by copying that expression. *Id.* at 68, 70. A copy of a screen display from VP-Planner Plus, one of the works held to be infringing in Paperback, is attached hereto as Exhibit B. (Dkt. No. 359, V:2, Ex. A thereto) The morning after the Paperback decision, Borland filed a declaratory judgment action against Lotus in the Northern District of California seeking a declaration of non-infringement. (Ex. 42, App. \_\_\_) The declaratory judgment action was dismissed in favor of this action by the District Court in California (Vaughn R. Walker, J.) on September 10, 1990. (Dkt. No. 36, Ex. 36, App. \_\_\_)

<sup>8</sup>The Mosaic action was a companion case to Paperback. Lotus Development Corp. v. Mosaic Software, Inc., Civil Action No. 87-0074-K (D. Mass. January 22, 1991). The SAPC action determined that Lotus acquired all rights to the VisiCalc spreadsheet program pursuant to a purchase of the assets of Software Arts Products Corp. in 1985. *See SAPC, Inc. v. Lotus Development Corp.*, 699 F. Supp. 1009 (D. Mass. 1988), *aff'd*, 921 F.2d 360 (1st Cir. 1990).

<sup>9</sup>References herein to "Tr." identify transcripts of conferences and hearings before the District Court, unless otherwise indicated.

supported by the record". Borland I, 788 F. Supp. at 80.<sup>10</sup> The District Court gave the parties an opportunity to file renewed motions that would "focus their arguments more precisely" in light of its rulings. Id. at 82.

Both Lotus and Borland did so on April 24, 1992. (Dkt. Nos. 167-73) After hearing these motions on May 19, 1992, the District Court took both under advisement. (Tr. of 5/19/92, at 44, App. \_\_\_) Borland initiated two further rounds of post-hearing briefing, including one addressed specifically to the Second Circuit's decision in Computer Assoc. Int'l. Inc. v. Altai, Inc., 982 F.2d 693 (2d Cir. 1992). (Dkt. Nos. 185, 189-90)

2. The summary judgment decision and its aftermath.

The District Court rendered its decision granting Lotus' motion in part and denying Borland's motion on July 31, 1992. The District Court determined that Borland had identified potential issues for trial concerning copyrightability -- i.e., whether the arrangement of the 1-2-3 menus was "functionally dictated" by certain "functional rules" or by concerns of "efficiency and usefulness." Borland II, 799 F. Supp. at 210. Thus, the District Court was unable to determine "the precise scope of Borland's infringement." Id. at 221. The District Court did conclude, however, that it was beyond genuine dispute "that a large part of the structure and arrangement of the menu commands is not driven entirely by functional considerations" (id. at 218), and that "no reasonable jury, applying the law, could find other than that the Quattro programs" were derived from illicit copying. Id. at 221.<sup>11</sup>

Borland then moved for certification of an interlocutory appeal. (Dkt. Nos. 201-02) The District Court denied the motion as premature, telling Borland's counsel:

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<sup>10</sup>For clarity, we follow the citation conventions adopted by Borland to refer to the four decisions below: "Borland I", reported at 788 F. Supp. 78 (D. Mass. March 20, 1992); "Borland II", reported at 799 F. Supp. 203 (D. Mass. July 31, 1992); "Borland III", reported at 831 F. Supp. 202 (D. Mass. June 30, 1993, as amended Aug. 19, 1993); and "Borland IV", reported at 831 F. Supp. 223 (D. Mass. Aug. 12, 1993, as amended Aug. 19, 1993).

<sup>11</sup>The District Court also granted Lotus' motion with respect to Borland's affirmative defense of waiver, but denied the motion concerning the defenses of laches and estoppel. Id. at 222-23.

"I have not yet decided even the copyrightability question in this case. I have decided only a very small part of it." (Tr. of 9/23/92, at 54, App. \_\_\_)

Claiming to have "new" evidence, Borland also moved for reconsideration of the District Court's decision. (Dkt. Nos. 197-200)<sup>12</sup> At a hearing held on October 16, 1992, the District Court denied Borland's motion (Tr. of 10/16/92, at 6-7, App. \_\_\_)<sup>13</sup> and set trial for the previously scheduled back-up date of February 1, 1993. (*Id.* at 12, App. \_\_\_)<sup>14</sup>

3. The origin of the "Key Reader" claim.

Immediately following the District Court's summary judgment decision, Borland removed the "1-2-3 emulation" user interface from its products, pursuant to a contingency plan it had adopted at the outset of the litigation.<sup>15</sup> It immediately began to publicize the Key Reader as its post-decision solution for providing "macro compatibility" with Lotus 1-2-3 in new versions of its products, including a version for the DOS operating system and another for the Windows operating environment.<sup>16</sup> Lotus promptly sought discovery into the creation and nature of the Key Reader, which Borland moved to block. (Dkt. No. 215-16; Stip. and Order Correcting Record, Nos. 20-21)

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<sup>12</sup>This "new" evidence consisted of a single declaration from a witness whose opinion testimony on related subjects Borland had previously submitted. Compare (First) Buechele Dec., Dkt. No. 89, App. \_\_\_, with (Second) Buechele Dec., Dkt. No. 199, App. \_\_\_.

<sup>13</sup>Borland's assertion that the District Court "conceded" the truth of its proffer at this hearing (Br. at 10) is a complete distortion of the record. What the District Court said was that even if one assumed, arguendo, that the untimely affidavit's contents were uncontested (a point conceded by neither Lotus nor the District Court), it would not have affected the outcome of the summary judgment motion. (Tr. of 10/16/92, at 6-7, App. \_\_\_)

<sup>14</sup>Borland also orally requested reconsideration of its motion to certify, which the District Court denied for the reasons previously given. (*Id.* at 15-17, App. \_\_\_) The District Court did indicate that it might be appropriate to certify an interlocutory appeal once all liability issues were decided. (*Id.* at 17-18, App. \_\_\_)

<sup>15</sup>Supp. Kohn Dec., ¶ 2, App. \_\_\_.

<sup>16</sup>Exs. 43-46, App. \_\_\_.

Following the representation by Borland's counsel that its new Quattro Pro for Windows product did "not contain the 1-2-3 menu command hierarchy even in a data file" (Tr. of 10/16/92, at 37, App. \_\_\_\_), Lotus was allowed to take one deposition on the subject. (Id.) Based upon the information it learned at that deposition (contradicting Borland's counsel's representation) (Warfield Tr. at IV:95-97, 100, 102-04, 112-13, 143-50, App. \_\_\_\_), Lotus moved on December 7, 1992, for leave to file a supplemental complaint alleging that the Key Reader infringed its Lotus 1-2-3 copyrights. (Dkt. Nos. 249-51)

4. Pretrial procedural problems.

On January 14, 1993, at the final pretrial conference with respect to Lotus' original complaint, Borland waived its jury demand on all issues concerning liability. (Tr. of 1/14/93, at 62-63, App. \_\_\_\_) Borland's counsel then proposed that the case be decided upon the summary judgment record. Counsel for Lotus responded that some form of factual stipulation might enable Lotus to agree. (Id. at 64, App. \_\_\_\_) The District Court explicitly advised the parties that it would require a formal stipulation, however, if it was to decide the case upon a designated record. (Id. at 65, App. \_\_\_\_) The parties and the District Court discussed a procedure for trying to reach an agreement and a schedule for evidentiary submissions in the event that no agreement was reached. (Id. at 66-72, App. \_\_\_\_)<sup>17</sup>

In the days that followed, however, Borland refused to negotiate any form of factual or procedural stipulation, insisting that the District Court had already determined, in the absence of an express agreement between the parties, to decide disputed issues of fact upon the summary judgment record. (Dkt. No. 308, at 1-4, App. \_\_\_\_) Borland further contended that the District Court had ruled that Borland could submit testimony from its own witnesses in hearsay form, without making them available to Lotus for cross-examination at trial. (Tr. of 1/29/93, at 17, App. \_\_\_\_) Indeed, Borland insisted that what was scheduled was a "hearing", not a trial.

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<sup>17</sup>At that conference, the District Court also granted Lotus leave to file its proposed supplemental complaint concerning the Key Reader, contemplating a Phase II trial commencing on March 1. (Id. at 21-23, App. \_\_\_\_)

At Lotus' request, the District Court convened another pretrial conference on January 29, 1993, which Borland omits from its chronology. The District Court began that conference by declaring that "the case is set for trial, not for hearing but for trial on Monday morning." (*Id.* at 2, App. \_\_\_) It went on to explain to Borland that if it expected the Court to resolve disputed issues of fact, the proceeding must be a trial. Testimony to be submitted at trial, the District Court made clear, must conform to the applicable rules of proof unless the parties stipulated otherwise, and they had not done so. (*Id.* at 18-23, App. \_\_\_)

Despite this conference, Borland appeared at the commencement of the Phase I trial on February 1, 1993, without having agreed to any stipulation and without its witnesses. (Trial Tr. of 2/1/93 at 12, App. \_\_\_) It now conceded that the proceeding was a trial (*id.* at 5-6), but attempted unsuccessfully to persuade the District Court to reverse its prior rulings concerning the nature of that trial. (*Id.* at 6-23, App. \_\_\_) Thus, Borland's suggestion that it was somehow surprised to learn "for the first time" on February 1 that it was appearing for trial on that date (Br. at 25) is false.

Nonetheless, the District Court gave Borland an opportunity to adjourn the trial to a later date and, if Borland wished, to undo all prior commitments governing trial. (Trial Tr. of 2/1/93, at 40-42, App. \_\_\_) It gave the parties another opportunity to attempt to reach an agreement. (*Id.* at 42-44, App. \_\_\_) The ensuing stipulations were presented or read in open court the following morning. (Trial Tr. of 2/2/93, at 2-6, App. \_\_\_)

The "scope" of the Phase I trial was defined by stipulation as "all issues not previously finally decided by way of summary judgment concerning Borland's alleged liability herein, and all its defenses thereto," excluding Key Reader issues. (Dkt. No. 330 at ¶ 1, App. \_\_\_; emphasis supplied) The parties also agreed to certain factual issues<sup>18</sup> and waived their rights to present witnesses or to demand live cross-examination at the Phase I trial. (*Id.* at ¶¶

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<sup>18</sup>These involved the question as to whether Borland had copied the "long prompts" of the 1-2-3 menus in its products. The parties agreed that the order of the long prompts followed the order of the menu commands, and that neither party would contend that the issue of long prompt copying was material to any other issue. (*Id.* at Ex. A, ¶¶ 1, 4, App. \_\_\_)

3-4, App. \_\_\_) Key Reader issues were set for a Phase II trial to commence thereafter and were governed by a separate stipulation. (*Id.* at Ex. B, App. \_\_\_)

5. The Phase I trial.

Once the procedural issues were resolved, the District Court proceeded to receive evidence at the Phase I trial. There were no live witnesses, although considerable testimony was presented in the form of affidavits or deposition excerpts. The District Court ruled upon the evidentiary objections counsel interposed, reserving decision on most relevance objections for a later ruling, if necessary. (See, e.g., Trial Tr. of 2/2/93, at 20, 24-25, App. \_\_\_; Trial Tr. of 2/3/93, at 94-100, App. \_\_\_) The District Court neither precluded Borland from rearguing any issue that was previously addressed upon summary judgment, nor excluded any evidence Borland proffered on the ground of its prior decisions. Borland attempted to reargue the issues of copying and copyrightability and those issues were, in fact, tried.<sup>19</sup>

6. The defense of "fair use" enters the case.

Borland did not plead the affirmative defense of "fair use" in its answer to Lotus' original complaint. (Dkt. No. 4, App. \_\_\_) It first raised the defense in its answer to Lotus' supplemental complaint on January 21, 1993. (Dkt. No. 307, App. \_\_\_) In its pretrial filing of January 29, Borland contended (without cited support) that its assertion of the defense extended retroactively to "all Lotus claims of infringement", but it made no effort to apply the defense to the claims at issue in the Phase I trial. (Dkt. No. 311 at 56-58, App. \_\_\_)

Borland did not attempt to do so until its counsel's summation. (Trial Tr. of 2/3/93, at 42-50, App. \_\_\_) Lotus immediately objected to the defense as untimely and argued that Borland had waived this affirmative defense by failing to allege it in its answer. (*Id.* at 58-59, 182, App. \_\_\_) Lotus also moved for judgment on the defense (while reserving the right to present a case in response), if the District Court permitted Borland to assert the defense

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<sup>19</sup>See Borland's Proposed Questions for the Jury, Dkt. No. 234, at Nos. 1-10 (copyrightability), Nos. 11-12 (copying), Nos. 13-14 (substantial similarity), and No. 15 (qualitative substantiality), App. \_\_\_.

belatedly. (*Id.* at 182-183, App. \_\_\_) After ascertaining that Borland had submitted all the evidence on this defense that it intended to proffer in its case-in-chief, the District Court directed the parties to submit further briefs concerning the defense's timeliness and the sufficiency of Borland's proof. (*Id.* at 184-195, App. \_\_\_) Three weeks later, Borland moved for leave to amend its answer. (Dkt. No. 343, App. \_\_\_)

On March 30, 1993, the District Court granted Borland's motion. (Dkt. No. 353, App. \_\_\_) The District Court further directed the parties to argue Lotus' motion for judgment at the commencement of the Phase II trial the following day. (*Id.*) After concluding that Borland had been fully heard on the issue and finding the authority under Rule 52(c), Fed. R. Civ. P., to reach a decision upon partial findings of fact, the District Court found that Borland had failed to show that its use of the 1-2-3 menu tree in the "1-2-3 emulation" menus of Quattro and Quattro Pro was a "fair use". (Trial Tr. of 3/31/93, at 51-52, App. \_\_\_)

7. The Phase II trial.

The District Court then proceeded with the Phase II trial. Unlike the first trial, two witnesses testified in court: Larry Roshfeld, Lotus' product marketing manager for 1-2-3, and Robert Warfield, the Borland software developer responsible for all versions of Quattro Pro. Both gave live demonstrations, subject to cross-examination, concerning the writing and execution of macros in 1-2-3 and the use of the Key Reader in various versions of Quattro Pro. (Trial Tr. of 3/31/93 at 69-124, 126-199, App. \_\_\_) The District Court also received other evidence relating to the issues raised by Lotus' supplemental complaint, including all Borland's defenses thereto.

8. The entry of the permanent injunction.

The District Court rendered its decision as to Phase I on June 30, 1993, and as to Phase II on August 12, 1993.<sup>20</sup> At a conference held on August 19, 1993, the District Court

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<sup>20</sup>These decisions were modified on August 19, 1993, to include factual material the parties had previously designated for confidential treatment. (Tr. of 8/19/93, at 8-9, App. \_\_\_)

presented the parties with drafts of documents reflecting two routes of appeal to this Court: an injunction and an order of certification pursuant to 28 U.S.C. § 1292(b). (Tr. of 8/19/93, at 15, App. \_\_\_) Borland's own counsel stated its preference for the "injunction route", representing that Borland intended to continue to infringe unless restrained by the District Court. (Id. at 23-24) Lotus asked for the injunction in lieu of certification and both sides, after agreeing upon the injunction's terms, consented to its immediate entry. (Id. at 43-44, App. \_\_\_) This appeal followed.

C. Summary of the Facts

Except with respect to certain of its affirmative defenses, Borland's appeal does not challenge any of the District Court's factual rulings, whether they were made at trial or as a determination of undisputed fact upon summary judgment. At the same time, Borland's treatment of the facts ignores this distinction, pretending that every proffer it made at any time was received and considered by the District Court for all purposes. In this section, we first address the facts presented upon summary judgment, attempting to clarify -- as Borland has not -- precisely which issues the District Court found not to be in genuine dispute, those which the Court held to be irrelevant as a matter of law and those which it reserved for trial. We then turn to the District Court's findings at trial.<sup>21</sup>

1. Facts not genuinely disputed upon summary judgment.

Borland either omits or misrepresents many of the critical facts that the District Court found were not in genuine dispute. Most notably, these concern the original creation of the Lotus 1-2-3 menus and their qualitative substantiality, or significance.

a. The creation of the Lotus 1-2-3 menus and menu structure.

It may be difficult today, in a world in which highly evolved and increasingly graphical user interfaces for personal computer software have become commonplace, to

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<sup>21</sup>We address Borland's affirmative defenses in Sections II and III, below.

appreciate the creative genius embodied in the user interface of Lotus 1-2-3 when it was written in 1982. At the time, Lotus 1-2-3's menus represented a major advance in the state of the art. Lotus first introduced Mitchell Kapor's affidavit concerning the original development of Lotus 1-2-3 at the Paperback trial in 1990, and his testimony has never been controverted.<sup>22</sup> It remains the critical focus for any understanding of the creation of the 1-2-3 menus.

Kapor conceived the initial idea for what would become Lotus 1-2-3 in early 1981 while using two programs he had previously written -- VisiPlot, a graphics product, and VisiTrend, a statistical analysis product. (Affidavit of Mitchell D. Kapor ("Kapor Aff."), ¶¶ 14-15, 19, App. \_\_\_) It occurred to Kapor that a single program which provided spreadsheet, graphics, and statistical capabilities, and which eliminated the need to transfer data between programs, could have significant market appeal. (Id. at ¶ 19)

At the time, the IBM PC had not yet been introduced. The Apple II was the de facto "industry standard" personal computer, and the VisiCalc spreadsheet product (which ran on that computer) was the most popular application program in the brief history of personal computing. The potential growth in personal computer software was well recognized. However, industry participants perceived a need for significant improvements in software design -- particularly in the area of user interfaces -- if that potential was to be fully realized. For example, VisiCalc displayed a series of letters arranged in alphabetical order to represent its array of available commands. See Paperback, 740 F. Supp. at 67 & App. 1 thereto. This cryptic notation forced users to memorize the commands or to consult the product's manuals or other written documentation, in order to decipher the letters and unlock the program's capabilities.

The development of 1-2-3 commenced in approximately June 1981. (Id. at ¶¶ 20-23) One of Kapor's goals was to create a product that would appeal to the broadest possible audience of potential users, including those with no previous experience with either personal computers or spreadsheet programs. (Id. at ¶ 25) From the outset, Kapor therefore

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<sup>22</sup>Although Mr. Kapor's deposition and trial testimony from the Paperback case was available to Borland, it elected neither to depose nor to cross-examine him at trial here.

perceived the successful design of Lotus 1-2-3's user interface as a significant objective. (*Id.* at ¶ 27) He aimed to create a user interface that would be both easy for novices to learn and convenient for more experienced individuals to use. (*Id.* at ¶ 26)

Before designing the 1-2-3 menus, however, Kapur and Jonathan M. Sachs, the principal architect of the "internals" of the 1-2-3 program, first specified the program's selection of functional capabilities or set of executable operations. (Kapur Aff., ¶ 72) Sachs was responsible for implementing those capabilities in the program's code. (Kapur Aff., ¶ 49; Affidavit of Jonathan M. Sachs ("Sachs Aff."), ¶ 5, App. \_\_\_) This process concluded in approximately August 1982. (Kapur Aff., ¶ 72)

From then until approximately October 1982, Kapur, Sachs and the members of their design team concentrated on expressing some of those capabilities to the user through the 1-2-3 menus. (Kapur Aff., ¶¶ 72-73)<sup>23</sup> They spent hundreds of hours refining the choice of each word to use in the menus, the order in which those words would appear within each menu level, and the organization and sequencing of the overall menu structure. (*Id.* at ¶¶ 73-74; Sachs Aff., ¶ 8) Numerous iterations of the menu tree were proposed and discarded.<sup>24</sup> Several persons contributed to the process, but all final decisions belonged to Kapur. (Kapur Aff., ¶ 74; Sachs Aff., ¶ 8)

In selecting the words used to represent the 1-2-3 menu commands, Kapur's goal was to choose, from numerous potential choices, those words "that would intelligently convey to the user the purpose of each command" in order "to make the menus as informative and intuitive

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<sup>23</sup>The menu commands are not the only commands available to users when working with 1-2-3, nor do they cause the program to perform arithmetical or mathematical operations. Such operations are indicated to the program within the individual "cells" in the spreadsheet grid, by use of familiar arithmetic notation (e.g., "+" or "-") or special commands called "@ functions" (because they are preceded by the "@" symbol) for more complex mathematical expressions. Other capabilities of the program are accessed by means of the special "function" keys available on the IBM PC keyboard. (*Id.* at ¶¶ 64-67)

<sup>24</sup>(Kapur Aff., ¶¶ 82-85, 88-89; Sachs Aff., ¶ 6; Exs. 511-12, 515, App. \_\_\_) Even the basic choice as to which capabilities would be expressed through the menu tree, as opposed to the "function" keys or other aspects of the program, remained flexible and was subject to further deliberation. (Kapur Aff., ¶¶ 86-87)

as possible." (Kapor Aff., ¶¶ 75, 82)<sup>25</sup> Kapor's goal in designing the 1-2-3 menus was to make it "easy for the user to understand and reflect as closely as possible the user's natural way of thinking" (*id.* at ¶ 46), while trying to "reflect a structured approach that communicated the product's underlying functionality." (*Id.* at ¶ 77) Ultimately, Kapor testified, the menu tree "was based largely on my intuition and subjective judgment . . . trying as best I could to imagine myself in the role of a typical user." (*Id.* at ¶ 79) He had no rulebook, model or data to guide him. (*Id.*)

b. The originality of the Lotus 1-2-3 menus.

In the lower court, Borland never asserted that the 1-2-3 menus were copied or derived from any previously published work or works, including VisiCalc. The District Court expressly held in Paperback that 1-2-3 used a "very different menu structure" from VisiCalc. 740 F. Supp. at 67. Borland never asked the District Court to rule differently in this case. To the contrary, its counsel abandoned any such claim early in the proceedings. (Tr. of 6/18/91, at 14, App. \_\_\_)

Instead, Borland focused on the fact that the menus of Lotus 1-2-3, like Kapor's earlier (and otherwise dissimilar) VisiPlot and VisiTrend programs, used full words rather than single letters, which were presented in a "two-line moving cursor" format.<sup>26</sup> (Br. at 10) The point was irrelevant. Lotus never argued, and the District Court never held, that Borland had copied 1-2-3's method of menu display or that the manner in which menus are displayed -- as

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<sup>25</sup>Kapor and his team were not only free to choose any sensible word, but could also invent new words, as they did in at least one instance (i.e., "Xtract"). (*Id.* at ¶¶ 97-99)

<sup>26</sup>The "two-line moving cursor" technique involves a first "menu" line displaying the set of commands then available for the user to invoke, with the command to which the cursor is presently set indicated by highlighting in inverse video. The second line displays the next sub-menu available following the selection of the highlighted command or a brief textual "long prompt" associated with the highlighted command. The user can move the cursor across the menu line to review the contents of each second line before making a command selection.

opposed to their words and organization -- is copyrightable.<sup>27</sup>

Borland also appears to argue that the 1-2-3 menus were not original because some of the words Mitch Kapor used in the 1-2-3 menus had been previously used for commands in other programs or in programming languages. (Br. at 10)<sup>28</sup> Yet Borland never contended, nor could it prove, that all the words used for Lotus 1-2-3's menu commands had previously appeared in a single program, much less that those same words had ever been arranged in the same hierarchical organization, to identify the same set of functional operations.<sup>29</sup> Thus, the originality of the 1-2-3 menus, in the sense of their independent creation by Mitch Kapor, is undisputed here.<sup>30</sup>

c. The qualitative substantiality of the 1-2-3 menu structure.

By any measure, Mitch Kapor succeeded in his goal of designing a product that would have broad appeal. In the face of significant established competition,<sup>31</sup> Lotus 1-2-3 soon supplanted VisiCalc as the most popular spreadsheet and it went on to become the best-selling

<sup>27</sup>Ironically, Borland points to the difference between its "cascading pull-down" menu presentation and Lotus' "two-line moving cursor" menus as the principal reason that its user interface is different. (Br. at 5) What Borland copied in this case was the copyrightable content of 1-2-3's menus -- the words and their order -- rather than the uncopyrightable method or format for displaying them on the screens. The law is clear that the format of menu presentation is not protected. See Telemarketing Resources v. Symantec Corp., 12 U.S.P.Q.2d 1991, 1996 (N.D. Cal. 1989), aff'd in part and vacated in part sub nom. Brown Bag Software v. Symantec Corp., 960 F.2d 1465 (9th Cir.), cert. denied sub nom. BB Asset Mgmt., Inc. v. Symantec Corp., \_\_\_ U.S. \_\_\_, 113 S. Ct. 198 (1992) (use of a main editing screen, menu bar, pull-down windows and color scheme held unprotectable); Paperback, 740 F. Supp. at 65-68.

<sup>28</sup>Presumably, Borland would also deny copyright protection to poems and novels if they employed words previously used in other works.

<sup>29</sup>Even the single affidavit Borland proffered on this subject in support of its motion for reconsideration made no such assertion concerning the words in the 1-2-3 menus, as the District Court observed. (Tr. of 10/16/93, at 6-7, App. \_\_\_) Borland's claim that "those words are common to spreadsheet products" (Br. at 11) is without record support.

<sup>30</sup>See Feist Publications, Inc. v. Rural Telephone Serv. Co., 499 U.S. 340, \_\_\_, 111 S. Ct. 1282, 1287 (1991) (originality requires independent creation by the author, as opposed to copying from other works).

<sup>31</sup>Competitive products available in 1983 included VisiCalc as well as Microsoft's MultiPlan, SuperCalc, Context MBA and numerous others. (Manzi Dec., Ex. A, App. \_\_\_)

application program ever. Its user interface -- including its menus -- unquestionably played "a substantial role" in that success, as the District Court found. Borland II, 799 F. Supp. at 219.

Borland never argued that the 1-2-3 menus were a commercially insubstantial or insignificant element of the work. To the contrary, both sides' experts agreed that they possess "great commercial significance."<sup>32</sup> Borland contended merely that 1-2-3 would have succeeded just as well if it had used other, equally good, words or arrangements.<sup>33</sup>

Contrary to Borland's assertions (Br. at 14, n.22), Lotus both objected to and disputed Borland's summary judgment submissions concerning the commercial importance of the precise wording and arrangement of the 1-2-3 menus.<sup>34</sup> The District Court was not required to resolve that issue at any stage of the proceedings below, and it did not purport to do so.<sup>35</sup> The District Court never held that 1-2-3's "market success . . . had little to do with the menu command hierarchy", or that "the words Lotus selected [for the menus] did not matter for 1-2-3's

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<sup>32</sup>Liddle Dec., ¶ 57, App. \_\_\_\_; Olson Dec., ¶ 39, App. \_\_\_\_; Emery Dec., ¶¶ 61, 110-113, App. \_\_\_\_.

<sup>33</sup>Each of Borland's affidavits directed to this subject was very carefully drafted to distinguish between the 1-2-3 menus as a whole, and the particular wording and arrangement of those menus. See Raburn Aff., ¶ 11, RE 2; Goldschmitt Aff., ¶ 12, App. \_\_\_\_; Liddle Dec., ¶¶ 51, 55-57, App. \_\_\_\_; Olson Dec., ¶ 28, App. \_\_\_\_.

<sup>34</sup>Lotus objected to the affidavits Borland submitted from two former Lotus employees, Vern Raburn and Marv Goldschmitt, as unqualified and incompetent. (Dkt. No. 153, at 71, n.53, App. \_\_\_\_) Lotus' chairman, Jim Manzi, testified to his personal involvement in relieving both men of their 1-2-3 marketing duties some two weeks and four months, respectively, after the product was first sold. (Manzi Dec., ¶¶ 11-12, 14-15, App. \_\_\_\_) Lotus also presented testimony to the contrary from several Lotus executives with long experience in marketing 1-2-3. (Manzi Dec., ¶¶ 21-22, App. \_\_\_\_; King Tr. at 83-84, App. \_\_\_\_; Ingari Tr. at 102-105, App. \_\_\_\_)

<sup>35</sup>Borland's evidence was proffered to support an argument that copyright protection extends only to the most commercially valuable element of a work at the time it was created -- a principle it invented by turning on their heads cases protecting small, but important, aspects of copyrighted works. (See Dkt. No. 177, at 23-25, App. \_\_\_\_) The District Court applied the appropriate standard instead. See Concrete Machinery, Inc. v. Classic Lawn Ornaments, Inc., 843 F.2d 600, 608 (1st Cir. 1988) (illicit copying must take more than "trivial aspects of another's work").

success", as Borland states. (Br. at 13, 14)<sup>36</sup>

In all events, Borland could not dispute the qualitative significance of the elements it copied. Borland's own software developers -- who had also written their own "native" menu trees for Quattro and Quattro Pro -- admitted that menus, standing alone, convey information to users and assist them in learning the program.<sup>37</sup> Moreover, by asserting that users of macros must refer to the 1-2-3 menus in order to "debug" (i.e., edit) or modify the macros they have previously written, these same developers and Borland's own experts were forced to concede that those menus serve an informative purpose.<sup>38</sup>

Borland also recognized that users place great importance upon these expressive aspects of the 1-2-3 menus. The developers and marketing executives responsible for Quattro and Quattro Pro conceded that at least one of their goals was to provide a "migration tool" for 1-2-3 users, whose fear of having to "learn a new menu tree" if they switched to Borland's products could be overcome by providing the "familiar and comfortable" 1-2-3 menu tree as an alternative to Borland's own.<sup>39</sup> The experts on both sides agreed that this provided Borland with a significant competitive advantage (Emery Dec., ¶¶ 47-56, 169, App. \_\_\_\_; Liddle Tr. at 130, App. \_\_\_\_; Olson Tr. at 174, App. \_\_\_\_), which Borland exploited to the hilt. Its early promotional material stressed: "If you know how to use 1-2-3, you know how to use Quattro. You don't have to learn a whole new program."<sup>40</sup>

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<sup>36</sup>Borland misquotes the District Court's decision on this point; the Court referred only to the contentions of Borland's experts, and then only to determine to give their opinions little weight. Borland III, 831 F. Supp. at 213-14.

<sup>37</sup>Bosworth Tr. at 144-145, 192-194, 338-339, 396, App. \_\_\_\_; Warfield Tr. at I:76-77, 124, II:364-366, App. \_\_\_\_.

<sup>38</sup>Bosworth Tr. at 140-141, 144-147, 192-194, 369-370, App. \_\_\_\_; Liddle Tr. at 116-117, App. \_\_\_\_; Olson Dec., ¶¶ 173-176, App. \_\_\_\_.

<sup>39</sup>Bosworth Tr. at 121, 191-193, App. \_\_\_\_; Jones Tr. at 27, 116-117, App. \_\_\_\_; Oswald Tr. at 55, 58, 171-172, App. \_\_\_\_; Dickerson Tr. at 93-94, App. \_\_\_\_.

<sup>40</sup>Dkt. No. 148, Ex. C-24 at 503897-8, attached hereto as Exhibit C; id. at Ex. C-27 at 509454, App. \_\_\_\_ ("if you've been using Lotus 1-2-3, you'll have no learning curve. QUATTRO PRO is so compatible with 1-2-3 that you can be up and running in just 10 minutes.")

Even on appeal, Borland concedes that the menus serve to "identify the functions" that the 1-2-3 program provides to its users (Br. at 12) -- an informative and communicative purpose that differs only in degree from the program's long prompts, "help" text, or associated user's manuals.<sup>41</sup> Indeed, its own expert witness (and corporate director), David Liddle, testified that the menus have a larger significance: for millions of users, the menus establish the recognizable "product identity" of Lotus 1-2-3. (Liddle Tr. at 80-82, App. \_\_\_)

2. Findings of fact at trial.

At the Phase I Trial, Borland litigated all infringement issues, including those previously addressed upon summary judgment.

a. Borland's copying.

Considering all the evidence as trier of fact at the Phase I Trial, the District Court found that Borland "copied the entire [1-2-3] menu tree" (Borland III, 831 F. Supp. at 215), in order to produce a "virtually identical copy", "albeit with additions, in its Quattro and Quattro Pro emulation interfaces." Id. at 212. The District Court found that Borland's "additions" to the 1-2-3 menus did not "alter the scope of copying": "The effect is similar to an identical copy of a book with some paragraphs and lengthy footnotes inserted, and some voluminous appendices attached at the end." Id. at 212.<sup>42</sup>

Borland does not even suggest that these findings are erroneous, nor could it. Borland conceded that it copied from Release 2.01 of Lotus 1-2-3, denying only that it copied

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<sup>41</sup>The "firm line" Borland perceives between the 1-2-3 menu commands and other forms of explanation that the program provides (Br. at 12) cannot be located in the testimony of Lotus' experts or of Mitch Kapor. They testified that the menu commands and the hierarchical structure of the menus serve an important tutorial purpose, especially for new or infrequent users. (Emery Dec., ¶¶ 64, 71-74, App. \_\_\_; Galler Dec. (Paperback), ¶ 118, App. \_\_\_; Second Galler Dec., ¶¶ 54-56, App. \_\_\_; Kapor Aff., ¶¶ 46, 75, 77, App. \_\_\_)

<sup>42</sup>"No plagiarist can excuse the wrong by showing how much of his work he did not pirate." Sheldon v. Metro-Goldwyn Pictures Corp., 81 F.2d 49, 56 (2d Cir. 1939) (L. Hand, J.). Accord, Altai, 982 F.2d at 714; Borland III, 831 F. Supp. at 212.

from earlier versions of the work from which Release 2.01 was derived.<sup>43</sup> Lotus submitted direct proof of Borland's copying at trial<sup>44</sup> and the record permits no other conclusion.

With respect to the Key Reader, the District Court found after the Phase II trial that to implement it Borland simply "used a program file containing the same copy of the 1-2-3 menu tree structure and commands that Borland had used in its emulation interface, but with each menu command stripped of everything after the first letter." Borland IV, 831 F. Supp. at 228.<sup>45</sup> The chief difference was that the file now contained "phantom 123-menus", as Borland's own internal documents described them, that were not ordinarily visible to the user. (Exs. 32-33, App. \_\_\_) Unlike the "1-2-3 compatible" menu tree, these "phantom menus" could now be accessed from within Quattro Pro's "native" mode.

Although the "phantom menus" are "never fully displayed to the user," as the District Court found (Borland IV, 831 F. Supp. at 228; emphasis supplied), Lotus demonstrated that the Key Reader did cause the program to display certain 1-2-3 menus when executing interactive macros.<sup>46</sup> (Trial Tr. of 3/31/93, at 91-92, App. \_\_\_) Lotus also demonstrated that, in those circumstances, the Key Reader in Quattro Pro for Windows would accept the keystroke sequences corresponding to the 1-2-3 menu commands (Borland IV, 831 F. Supp. at 234), and would display a series of active, if blank, menu boxes reflecting the "1-2-3 emulation" menus from which it was derived. (Trial Tr. of 3/31/93 at 101-02, 113-16, App. \_\_\_; Dkt. No. 249, Ex. 6, App. \_\_\_)

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<sup>43</sup>Even though Borland had previously stipulated that there was no material difference between Release 2.01 and its predecessor, Release 2.0 (Dkt. No. 108, Ex. H), the District Court carefully compared the two versions itself before finding that fact. Borland III, 831 F. Supp. at 211.

<sup>44</sup>Bosworth Tr. at 96-109, 265-266, App. \_\_\_; Lin Tr. at 49-50, App. \_\_\_; Smith Tr. at 18-19, 23, App. \_\_\_; Warfield Tr. at I:49-53, 56, 64-69, II:212, App. \_\_\_; Dkt. No. 359, VII:A3, App. \_\_\_.

<sup>45</sup>Thus, the Key Reader was nothing more than the fourth iteration of a copy of the Lotus 1-2-3, Release 1A menus that Robert Warfield first made in late 1983 to create a "clone" product called Farsight. Farsight became a 1-2-3, Release 2.01 clone called Surpass, which in turn became the "1-2-3 emulation" menus in Quattro Pro. (Warfield Tr. at I:49-53, 56, 64-69, II:212, App. \_\_\_)

<sup>46</sup>Interactive macros pause at the "{?}" special macro command to allow the user to provide input before resuming macro execution.

The District Court found it immaterial that Borland had condensed or abridged the 1-2-3 menu commands in the "phantom menus", or that it made other changes to the "1-2-3 emulation" menus concerning certain items, such as the "symbols used to record Lotus's menu structure". *Id.* at 228-229. The "phantom menus" were, nonetheless, derived from the Lotus 1-2-3 menus (*id.* at 234) and contained "a virtually identical copy of the menu structure of Lotus 1-2-3 including the first letter of each menu command in the corresponding location in the copy of the menu structure." *Id.* at 229. Again, Borland does not question these findings.

b. Functional constraints.

Borland failed to identify, at either trial, any particular menu command or discrete portion of the Lotus 1-2-3 menus that was supposedly dictated by functional constraints or efficiency concerns. There is no record support for Borland's claim that "each menu label" -- *i.e.*, each word chosen to represent a menu command -- "and its underlying function 'merged'".<sup>47</sup> (Br. at 11) Borland simply did not make any proffer of proof at that level of detail. As the District Court found:

"Borland has not argued or provided any evidence that any specific aspect of menu structure or command names, short of the entire menu tree, is dictated solely or influenced mainly by functional considerations." (*Borland III*, 831 F. Supp. at 215)

Neither did Borland attempt to prove that the 1-2-3 menu tree was only one of a limited number of ways to create and arrange a menu structure that would provide users with the same underlying functionality or set of executable operations. To the contrary, Borland admitted that a variety of programs exist that provide functionality comparable to 1-2-3, but do so using different menus and menu structures -- including the "native" menu trees of its own products.<sup>48</sup>

The District Court received into evidence numerous examples of such programs. (Dkt. No. 360,

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<sup>47</sup>The evidence at trial concerning this issue tended to disprove Borland's assertion, indicating that alternative words could, in fact, have been chosen for each 1-2-3 menu command. (Exs. 4-8, 20-27, 518-522 (contained in Dkt. No. 360); Olson Dec., ¶ 35, App. \_\_\_; Liddle Dec., ¶ 54, App. \_\_\_; Liddle Tr. at 120-22, App. \_\_\_)

<sup>48</sup>Dkt. No. 144, at Nos. 27-28, 34, App. \_\_\_; Ex. 7, "User's Guide", App. I thereto, App. \_\_\_.

the "Software Library")<sup>49</sup> It found that the differences among their menu trees could not be explained by minor differences in their functionality, and were "so large that they are, in a practical sense if not literally, incapable of enumeration." Borland III, 831 F. Supp. at 214.

Rather, Borland's position at trial was that the existence of alternatives to the 1-2-3 menu tree was irrelevant, because all menu trees are "systems", and every part of a system is unprotectable under Section 102(b). (Trial Tr. of 2/3/93, at 52-53, App. \_\_\_\_ ) The "proof" Borland proffered to show why a menu tree is a system, however, consisted largely of conclusory expert opinion, riddled with undefined terms, which failed to provide any reasoned explanation for its conclusions. Borland III, 831 F. Supp. at 218. The District Court gave this testimony appropriately little weight. Id. Borland also failed to rebut the testimony of Lotus' experts that the term "system" may be defined so broadly that even the source code of a computer program, or the text of a book, would fit within its scope.<sup>50</sup> Borland IV, 831 F. Supp. at 231. Even if these works could be characterized as "systems" for the communication of ideas or facts (or of instructions to a computer), the District Court correctly held that their particular presentation in a book, compilation, program or menu tree may comprise protected expression, if the other requirements for copyrightability are met. Id.<sup>51</sup>

Finally, Borland contended that Kapor's design of the 1-2-3 menu tree was not a "creative" act because it resulted from the application of certain principles that he had devised to guide its development. (Trial Tr. of 2/3/93, at 51-52, App. \_\_\_\_; Dkt. No. 359, VII:A6, at No. 2, App. \_\_\_\_ ) Borland's putative experts recast Kapor's principles as "functional rules" that supposedly so restricted his range of potential choice that the result was neither creative nor

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<sup>49</sup>The parties provided the District Court with a personal computer containing a "Software Library", consisting of more than a dozen examples of different spreadsheet programs, set up to facilitate easy review of the varying menu structures each employs. See also Emery Dec., ¶¶ 87-91, App. \_\_\_\_.

<sup>50</sup>Emery Dec., ¶¶ 94-106, App. \_\_\_\_; Second Galler Dec., ¶¶ 68-74, App. \_\_\_\_.

<sup>51</sup>The only difference between what Borland copied from 1-2-3 in the "1-2-3 emulation" menus and in the Key Reader in this regard is that the presentation of the elements copied in the Key Reader is perceived by the program (or the computer), rather than the user. Id. at 232-33.

expressive. (Olson Tr. at I:115-20, 137-39, App. \_\_\_) These same experts admitted, however, that certain of their "rules" were no more constraining than are the rules or principles for clear writing. (*Id.* at 54, 117-18, App. \_\_\_) If writing according to "rules" in this sense were sufficient to preclude copyright protection, then Strunk and White's The Elements of Style alone would render most prose works uncopyrightable. (Trial Tr. of 2/3/93, at 80-82, App. \_\_\_)

Neither could Borland explain why -- if these so-called "rules" were so mechanical and confining -- Kapor freely violated them (Kapor Aff., ¶¶ 88-92, App. \_\_\_), as the District Court found he had frequently done based upon its own detailed examination of the 1-2-3 menu tree. Borland III, 831 F. Supp. at 213. Moreover, Borland did not, and could not, demonstrate that these "rules" compelled any particular result. Its own experts and developers conceded that guidelines of this sort do not always point in the same direction; developers must frequently balance competing objectives and make choices, or trade-offs, when those objectives conflict.<sup>52</sup> These trade-offs require the exercise of subjective judgment.<sup>53</sup>

In short, Borland does not challenge the District Court's finding that the 1-2-3 menu tree was "capable of a very wide variety of expressions" at the time it was created. Borland III, 831 F. Supp. at 215. Neither does Borland contest its finding that the so-called "functional rules" did not limit the range of variation in the 1-2-3 menu tree "to a number far enough short of infinity that any way of expressing the number in English words has come into common usage." *Id.* Simply put, Borland's position is that the 1-2-3 menu structure is uncopyrightable, regardless of the extent to which it represents the free choice or unique expression of its creators.

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<sup>52</sup>Bosworth Tr. at 347-350, App. \_\_\_; Warfield Tr. at I:126-128, App. \_\_\_; Olson Tr. at I:115-118, 128, App. \_\_\_.

<sup>53</sup>Bosworth Tr. at 256-259, 328-332, 389-392, App. \_\_\_; Warfield Tr. at I:159-160, 165-168, II:279-281, 341-342, 356, App. \_\_\_; Olson Tr. at I:120-122, App. \_\_\_; Posner Tr. at 98-100, App. \_\_\_; Emery Dec., ¶¶ 24-31, 33, App. \_\_\_; Galler Dec. (Paperback), ¶¶ 21-27, 55-90, App. \_\_\_; Gottheil Tr. at 164, App. \_\_\_

## ARGUMENT

### I

#### THE DISTRICT COURT WAS CORRECT IN ITS DETERMINATION OF COPYRIGHTABILITY

Borland contends that the District Court erred when it held that the Lotus 1-2-3 menu commands and menu tree are copyrightable because, according to Borland, they comprise a "system", "method of operation", or "process" that is excluded from copyright protection by 17 U.S.C. § 102(b). Stated in several different ways, this is essentially Borland's only argument.

The central premise of this argument, however, is a misrepresentation concerning the holding below. The District Court did not hold that the Lotus 1-2-3 menus were protectable even though they are "nothing more than a selection and arrangement of executable operations," as Borland repeatedly and falsely asserts. (See, e.g., Br. at 8)<sup>54</sup> To the contrary, the District Court explicitly recognized that the functional capabilities or "executable operations" that the program provides are part of the unprotected "idea" (or "system", or "method", etc.) of the program. Borland II, 799 F. Supp. at 217. Indeed, it further recognized that the selection and "definition" of those functional capabilities -- i.e., the developers' choices as to precisely which "executable operations" to provide in the program -- was also part of the program's idea. Borland III, 831 F. Supp. at 211.

Rather, the District Court held that the 1-2-3 menus were protected because, and only to the extent that, they contained identifiable expression distinct and separable from the program's "selection" or "array" of executable operations. Id. The District Court found that the Lotus 1-2-3 menus contained such elements in their unique arrangement of words or "textual labels" in a menu tree to explain and present the "set of executable operations" to the program

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<sup>54</sup>Borland misquotes a portion of the Key Reader decision in which the District Court held that, even if Borland's contentions concerning Borland's use of the 1-2-3 menu structure and first letters of menu commands in the Key Reader could be viewed in that light, it would not foreclose the possibility that Borland also copied protected expression. Borland IV, 831 F. Supp. at 231.

user. Id. at 216.<sup>55</sup> This careful distinction, reached after two trials and a painstaking analysis of all the works at issue, is lost on Borland.<sup>56</sup>

Borland does not challenge the District Court's findings of fact in support of its copyrightability holding. Rather, Borland presents two legal arguments: first, that the District Court purportedly employed the wrong methodology in determining the copyrightability of the elements of Lotus 1-2-3 that it copied, and second, that all menu commands and menu structures are per se uncopyrightable under Section 102(b). Neither argument is sound. To demonstrate why, we begin with Congress' mandate to extend meaningful copyright protection to computer programs.

A. Congress Expressly Determined That Computer Programs Are To Be Afforded Meaningful Copyright Protection As Literary Works

In 1976, when Congress adopted the new Copyright Act, it intentionally chose to define protected "works of authorship" in a broad and general way (rather than through the approach of precise enumeration used in earlier enactments).<sup>57</sup> Accordingly, the new Section 102(a) provided that:

"Copyright protection subsists . . . 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."  
(Emphasis supplied.)

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<sup>55</sup>In the case of the Key Reader, Borland merely abbreviated the menu words to their first letters, while maintaining their hierarchical relationship and structure. Borland IV, 831 F. Supp. at 231. The District Court explicitly limited its holding to the specific facts before it -- namely, "only issues involved in on-the-fly interpretation using Borland's 'phantom' menus", which contain a copy of the Lotus menu tree. Id. at 230.

<sup>56</sup>Borland's erroneous statement of the District Court's holding is parroted in a number of its carefully coordinated amicus briefs. See, e.g., Brief Amicus Curiae of Copyright Law Professors at 20; Brief Amicus Curiae of Software Entrepreneurs' Forum at 5-6; ACIS Br. at 3, 8.

<sup>57</sup>In so doing, Congress acted pursuant to express authority drawn from Article I, Section 8 of the Constitution.

As this underscored language reflects, Congress intended the definition of protected "works of authorship" to be open-ended enough to embrace whatever new media of expression modern technology might devise, regardless of the form of "machine" or "device" required for the "work" to be "perceived" or "communicated".<sup>58</sup>

Section 102(a) goes on to provide an "illustrative and not limitative" list of seven categories of protected "works of authorship". See 17 U.S.C. §§ 101, 102(a). Among the enumerated categories is "literary works", which are defined in Section 101 as "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". (Emphasis supplied.) Computer programs are "literary works" within the meaning of Sections 101 and 102 of the Copyright Act, and are to be treated as such for purposes of determining the scope of their protection. See H.R. Rep. No. 1476, 94th Cong., 2d Sess. at 54 (hereinafter "House Report"), reprinted in 1976 U.S. Code Cong. & Admin. News 5659, 5667.<sup>59</sup>

The 1976 Copyright Act also expressly adopted the judicially developed doctrine of "merger" for distinguishing the "expression" of an idea from the underlying "idea" itself.

Thus, Section 102(b) of the Copyright Act provides:

"In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work." (17 U.S.C. § 102(b))

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<sup>58</sup>Neither does the definition restrict "works of authorship" to works that are perceptible to a person; it is sufficient if the work can be "reproduced or otherwise communicated . . . with the aid of a machine or device." *Id.*; see Borland IV, 831 F. Supp. at 232-33.

<sup>59</sup>The House Report further clarifies: "The term 'literary works' does not connote any criterion of literary merit or qualitative value: it includes catalogs, directories, and similar factual, reference, or instructional works and compilations of data. It also includes computer data bases, and computer programs to the extent that they incorporate authorship in the programmer's expression of original ideas, as distinguished from the ideas themselves." *Id.*

Contrary to Borland's contention (Br. at 34), the purpose of Section 102(b) was not to supplant the traditional idea/expression dichotomy, and the accompanying merger doctrine, as the dividing line between the protected and unprotected elements of a copyrightable work. The legislative history clearly demonstrates that Congress had the opposite intent:

"Section 102(b) . . . in no way enlarges or contracts the scope of copyright protection under present law. Its purpose is to restate, in the context of the new single Federal system of copyright, that the basic dichotomy between expression and idea remains unchanged." (House Report at 57, reprinted in 1976 U.S. Code Cong. & Admin. News at 5670; emphasis supplied.)

Borland's attempt to show that Congress had some other meaning in mind when it enacted Section 102(b), through a variety of statements made to Congress or by Congress years before the passage of the 1976 Act (Br. at 34-38), is spurious as legislative history and meaningless as a source of guidance for interpreting the provision. See Paperback, 740 F. Supp. at 49-51; Borland I, 788 F. Supp. at 93; Borland IV, 831 F. Supp. at 232. There is no support for Borland's contention that Section 102(b) was intended to require courts to determine copyrightability by a semantic process, in which the only issue is whether a statutorily disqualifying label (such as "system" or "process") can be applied to the copyrighted work.<sup>60</sup>

Neither was the purpose of Section 102(b), as Borland also suggests, to "limit the scope of copyright protection for computer programs" to some form of second-class status. (Br. at 34) The legislative history shows that Congress intended computer programs to be treated no differently than other literary works. See House Report at 57, reprinted in 1976 U.S. Code Cong. & Admin. News, at 5670 (Section 102(b) sufficiently addressed any concern about separating expression from methodology or process in computer programs).

Congress reaffirmed this intention in 1980 when it adopted, without modification, the recommendations of the National Commission on New Technological Uses of Copyrighted

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<sup>60</sup>As the District Court observed in Paperback, such "strained analogies", labels and "word games" would serve only to obscure a reasoned analysis of the merits of the copyrightability determination. 740 F. Supp. at 71-72.

Works ("CONTU")<sup>61</sup> concerning what, if any, changes in the 1976 Act were appropriate to accommodate the inclusion of computer programs.<sup>62</sup> The CONTU Report proposed limited technical corrections to the 1976 Act and recommended continued protection for computer programs as "literary works" under general copyright principles.<sup>63</sup> It concluded that the idea/expression distinction should be used to determine which aspects of computer programs are copyrightable.<sup>64</sup>

Moreover, both CONTU and Congress expressly recognized that the works of authorship to be created in this new medium of expression would be fundamentally utilitarian and functional in nature.<sup>65</sup> Congress did not overlook the fact that computer programs were, in many respects, more like tools than works of aesthetic art. So are many other useful writings long protected by copyright, such as maps, charts, fact compilations, dictionaries, code books, encyclopedias, advertising and instruction manuals.<sup>66</sup> It nonetheless determined that expression in this particular form of useful writing should be eligible for copyright protection, to the same extent as other literary works.<sup>67</sup> To the extent that Borland and its allies suggest that computer programs, by nature, are not entitled to the full protection of copyright law, Congress has already rejected these arguments.

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<sup>61</sup>CONTU was established by Congress in 1974 specifically for the purpose of studying the relationship between computers and copyright. Pub. L. 93-573, § 201(b)-(c), 88 Stat. 1873-4 (1974). See Final Report of the National Commission on New Technological Uses of Copyrighted Works, ("CONTU Report") (1978).

<sup>62</sup>Pub. L. No. 96-517, 94 Stat. 3015, 3028 (1980), codified at 17 U.S.C. §§ 101, 117.

<sup>63</sup>CONTU Report at 1-2.

<sup>64</sup>Id. at 37-46; see also Paperback, 740 F. Supp. at 54.

<sup>65</sup>CONTU Report at 21 ("That the words of a program are used ultimately in the implementation of a process should in no way affect their copyrightability.").

<sup>66</sup>See Arthur R. Miller, Copyright Protection for Computer Programs, Databases, and Computer-Generated Works: Is Anything New Since CONTU?, 106 Harv. L. Rev. 977, 986 (1993) (hereinafter, "Miller") (the author served as a CONTU Commissioner and as a member of its Software Committee).

<sup>67</sup>Id. at 983 (by following CONTU's recommendations, Congress "endorsed the notion that the same principles that apply to traditional literary works should govern computer programs").

B. The District Court's Holding is Supported by the Well-Settled Principle that Copyrightability for Computer Programs Extends Beyond a Program's Source and Object Code

A substantial body of case law has developed under the 1976 Act in which the courts, applying traditional copyright principles, have considered the extent of original expression protected by a computer program's copyright. Beginning with the cases involving the protection of source and object code (including the code of "operating systems"),<sup>68</sup> the courts have also recognized protection for what they often refer to as the non-literal elements of computer programs, including the organization and structure of program code,<sup>69</sup> and the user interfaces of programs, including menus and the screens upon which they are displayed.<sup>70</sup> The

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<sup>68</sup>E.g., Apple Computer, Inc. v. Franklin Computer Corp., 714 F.2d 1240, 1249-53 (3d Cir. 1983), cert. dismissed, 464 U.S. 1033 (1984) (protecting operating system for the Apple II computer); Apple Computer, Inc. v. Formula Int'l, Inc., 725 F.2d 521, 523-25 (9th Cir. 1984) (same); Pearl Systems, Inc. v. Competition Electronics, Inc., 8 U.S.P.Q.2d 1520, 1524 (S.D. Fla. 1988) ("separate subroutines in a computer program are protected by the copyright laws").

<sup>69</sup>E.g., Whelan Assoc., Inc. v. Jaslow Dental Lab., Inc., 797 F.2d 1222, 1224-25 (3d Cir. 1986), cert. denied, 479 U.S. 1031 (1987) (copyright protection extends beyond literal program code and protects structure, sequence and organization of a program); SAS Institute, Inc. v. S & H Computer Systems, Inc., 605 F. Supp. 816, 830 (M.D. Tenn. 1985) (copying of computer program's organization and structural details).

<sup>70</sup>E.g., Autoskill, Inc. v. National Educ. Support Sys., Inc., 994 F.2d 1476, 1495 n.23, 1499 (10th Cir.), cert. denied, \_\_\_ U.S. \_\_\_, 114 S. Ct. 307 (1993) (non-literal aspects of computer program, including keying procedure and hierarchical presentation of skill levels, could constitute protectable expression); Johnson Controls, Inc. v. Phoenix Control Sys., Inc., 886 F.2d 1173, 1175-76 (9th Cir. 1989) ("non-literal components" of program "including the structure, sequence and organization and user interface" constituted expression); CMAX/Cleveland, Inc. v. UCR, Inc., 804 F. Supp. 337, 351-5 (M.D. Ga. 1992) (holding "non-literal elements" of a computer program, including file structures, screens and reports, and transaction codes, copyrightable); Consul Tec, Inc. v. Interface Systems, Inc., 22 U.S.P.Q.2d 1538, 1541 (E.D. Mich. 1991) (holding copyrightable a program's "unique compilation of commands, its command line syntax, and its status message codes, all of which constitute unique, creative expression"); Manufacturers Technologies, Inc. v. Cams, Inc., 706 F. Supp. 984, 994 (D. Conn. 1989) (extending protection to the "flow and sequencing" of menu screen displays); Digital Communications Assoc., Inc. v. Softclone Distrib. Corp., 659 F. Supp. 449, 460 (N.D. Ga. 1987) (single "status screen" held copyrightable); Broderbund Software, Inc. v. Unison World, Inc., 648 F. Supp. 1127, 1133-4 (N.D. Cal. 1986) (extending protection to software program's user interface, including the structure and sequence of menu screen displays). See also Brown Bag, 960 F.2d at 1477 (acknowledging that copyright protection applies to user interface of computer program, including menus and screen displays, but finding no infringement).

analysis in these cases has not always been consistent and the outcomes have, obviously, varied according to the particular facts of each case. Yet every court to consider the issue has held that the protection of a computer program goes beyond its "literal" elements (e.g., source and object code) and, as is true for other forms of literary works, extends to its "nonliteral" elements, including the user interface, as well.

Nonetheless, Borland argues that the appropriate copyright protection for a computer program extends only to its source and object code and, perhaps, to the detailed structure of such code. (Br. at 41) User interfaces, says Borland, are not protected unless, and then only to the extent that, they contain aesthetic elements sufficient to qualify as a freestanding "audiovisual" work. (Id.) Borland's premise is that a program's user interface is alien to the program that generates it, and is unprotected by its copyright.

Borland is mistaken. Lotus 1-2-3 is a computer program and its user interface -- including its menus and menu tree -- is an integral part of that program as it was conceived and written by its authors.<sup>71</sup> The menus are not a "product" of the program in the sense that, for example, a novel written with a word processing program, or a computer animation created by a graphical arts program, would be a "product" of such works. Rather, they are the program, when viewed from the perspective of its users. To the user, the source and object code are invisible.

To the extent that Borland seeks to base its argument upon the definition of a "computer program" contained in Section 101 of the Copyright Act (Br. at 6),<sup>72</sup> it is mistaken on at least four counts. First, as the late Professor Nimmer explained, the statutory definitions merely identify, in general terms, some (but not even all) of the types of "works of authorship"

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<sup>71</sup>Although they may reflect separate authorship, both the code and the textual screen displays generated by a computer program are registered as a single work, pursuant to regulations promulgated by the Copyright Office. "Registration and Deposit of Computer Screen Displays", 53 Fed. Reg. 21,817, at 21,819 (1988) ("[T]he computer program code and screen displays are integrally related and ordinarily form a single work.")

<sup>72</sup>"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.

that are eligible for protection. They do not and are not intended to provide a measure by which one can define the limits of protection afforded to a particular type of work.<sup>73</sup>

Second, the statutory definition of a computer program does not say that the only "statements or instructions" to which it refers are "source" or "object" code. Indeed, as Borland and its amici argue (Br. at 32), the Lotus 1-2-3 menu commands can be viewed as a set of statements and instructions which directly or indirectly cause the computer to act in a specific manner.<sup>74</sup> Thus, they fit within the literal words of the statutory definition itself.

Third, Borland's notion that only graphical user interfaces are protectable by copyright ignores the fact that textual menus squarely meet the definition of a literary work -- i.e., "works, other than audiovisual works, expressed in words, numbers or other verbal or numerical symbols or indicia". 17 U.S.C. § 101. The premise that "audiovisual" user interfaces consisting of, for example, the simplest form of icons, are more strongly protected by copyright than menus expressed in words, is pure invention on Borland's part.

Finally, as every court to consider the question (including Altai) has held, because Congress intended computer programs to be viewed and treated as literary works for copyright purposes, they are entitled to protection from nonliteral as well as literal copying. Borland has not and cannot cite a single case holding that the menus of a software program are uncopyrightable as a matter of law. That is not the holding in Baker v. Selden,<sup>75</sup> in Ashton-Tate v. Ross,<sup>76</sup> or in Computer Associates v. Altai, as we demonstrate below.

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<sup>73</sup>Examples given by the late Professor Nimmer include the definition of a "motion picture", which does not specifically include the work's protected dialogue, or of "literary works", which does not include the protected plot of a novel. Declaration of Professor Melville B. Nimmer ¶ 24, reprinted in Anthony L. Clapes, Patrick Lynch and Mark R. Steinberg, Silicon Epics and Binary Bards: Determining the Proper Scope of Copyright Protection for Computer Programs, 34 UCLA L. Rev. 1493, 1591 (1987).

<sup>74</sup>Viewed in this sense, the hierarchical arrangement of the 1-2-3 menu tree is the compiler or interpreter program for the menu commands, which Borland copied in the Key Reader.

<sup>75</sup>101 U.S. 99 (1879).

<sup>76</sup>Ashton-Tate Corp. v. Ross, 728 F. Supp. 597 (N.D. Cal. 1989), aff'd, 916 F.2d 516 (9th Cir. 1990).

C. Baker v. Selden Does Not Determine the Outcome Here

Both Borland and its amici insist that the Supreme Court decided this case over one hundred years ago in Baker v. Selden, before the authors of 1-2-3 were born or the personal computer was invented. They misread that seminal decision. Both the District Court and the Second Circuit in Altai understood that, although Baker v. Selden provides a useful starting point for analyzing software copyrightability, it cannot (for obvious contextual reasons) provide easy answers. As the Second Circuit wrote, the decision "offers scant guidance on how to separate idea or process from expression", or "how to further distinguish protectable expression from that expression which 'must necessarily be used as incident to' the work's underlying concept." Altai, 982 F.2d at 705. Accord, Borland I, 788 F. Supp. at 93.

The question in Baker v. Selden was not, as Borland argues, whether a system consisting of words could be protected by copyright, but whether one author's description of an accounting system precluded others from describing the same system in their own words. Selden lost because, in the words of the Supreme Court, his "evidence" was "principally directed to the object of showing that Baker uses the same system" (101 U.S. at 101), rather than proving that Baker had copied "the same methods of statement, whether in words or illustrations" which "would undoubtedly be an infringement of the copyright". 101 U.S. at 104.<sup>77</sup> The facts are obviously much different in this case. Borland, unlike Baker, copied the words.

Moreover, Baker v. Selden is "the cornerstone for what has developed into the doctrine of merger"<sup>78</sup> -- the fundamental copyright principle that expression which is necessarily incidental to a particular "idea" (or "system"), and which cannot be protected without protecting

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<sup>77</sup>As the Supreme Court noted: "The defendant uses a similar plan so far as results are concerned; but makes a different arrangement of the columns, and uses different headings." 101 U.S. at 100.

<sup>78</sup>Altai, 982 F.2d at 707.

the idea (or system) itself. "merges" with that idea." Again, this is clear from the language of Baker v. Selden:

"[W]here the art [Selden's book] teaches cannot be used without employing the methods and diagrams used to illustrate the book, or such as are similar to them, such methods and diagrams are to be considered as necessary incidents to the art, and given therewith to the public." (101 U.S. at 103)

Thus, if the forms Selden developed were "necessary incidents" to his system, so that one could not practice the system without using his (or substantially similar) forms, all use of the system would be barred if Selden's forms were protected. On the other hand, if Selden's system could be used with a wide variety of forms, protecting any original set of forms would not lead to the same result.<sup>80</sup> The doctrine of "merger" springs from this critical distinction.

It is ironic that Borland criticizes the District Court both for applying the merger doctrine -- which Borland describes as the "existence of a choice" (Br. at 30-32) -- and for supposedly ignoring the lesson of Baker v. Selden. The merger doctrine is the lesson of Baker v. Selden.<sup>81</sup> It is also an essential tool for distinguishing protected "expression" from unprotected "ideas" and "systems" in computer programs.<sup>82</sup> And whether Borland understands it or not, "choice" is the "touchstone" of merger analysis.

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<sup>79</sup>Id. at 704 ("those aspects of a work, which 'must necessarily be used as incident to' the idea, system or process that the work describes, are not copyrightable"); Morrissey v. Procter & Gamble Co., 379 F.2d 675, 678-79 (1st Cir. 1967) (relying on Baker v. Selden to hold that expression inseparable from an idea is not copyrightable).

<sup>80</sup>That Baker's and Selden's forms were not identical would not preclude a finding of merger, if the potential variation between them was severely limited. See Morrissey, 379 F.2d at 678 (merger applies when subject matter is so narrow that it necessarily permits only one or "a limited number" of expressions).

<sup>81</sup>Altai, 982 F.2d at 707 (citing Morrissey, 379 F.2d at 678-679; Digital Communications, 659 F. Supp. at 457).

<sup>82</sup>See Gates Rubber Co. v. Bando Chemical Indus., Ltd., 9 F.3d 823, 836-38 (10th Cir. 1993); Altai, 982 F.2d at 707.

1. Defining the system.

Borland further misreads Baker as support for its novel theory that any work that can be described as a "system" is uncopyrightable in its entirety, regardless of the outcome of any merger or separability analysis that might be applied to it.<sup>83</sup> To Borland, the definition is everything and if the definition of "system" fits, a finding of uncopyrightability must follow. Baker cannot bear this weight.

The problem is that the term "system", like so many others in copyright (or, indeed, in other areas of the law), has no fixed or settled meaning. Section 102(b) does not provide one; neither did the Supreme Court in Baker. In the computer field, one may define a "system" as "any collection of component elements that work together to perform a task."<sup>84</sup> All computer programs of any complexity would meet that description. So would the words of any textbook or the notes of any song, if its "task" were defined as instruction or entertainment.<sup>85</sup> If Borland's reasoning were correct, every aspect of a computer program would be unprotectable -- even its source code. Borland IV, 831 F. Supp. at 231. Because Borland's interpretation of Section 102(b) would nullify the Congressional mandate to extend copyright protection to computer programs, it cannot be what Congress intended.

Congress stated, instead, that it intended to embody the idea/expression dichotomy in Section 102(b). This inevitably requires a more careful analysis and defies any

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<sup>83</sup>Borland relies on dictum from Crume v. Pacific Mut. Life Ins. Co., 140 F.2d 182 (7th Cir.), cert. denied, 322 U.S. 755 (1944), as its primary support for this contention. (Br. at 45) The court in Crume, however, added this significant explanation of its holding: "It may be that we have gone further than necessary in denying plaintiff's claim as to infringement. This is so for the reason that defendant's alleged infringing material is not an exact copy of the plaintiff's copyrighted pamphlets. . . . We have compared the documents and are of the opinion that there is a substantial difference in defendant's language, sufficiently so to escape the charge of infringement." 140 F.2d at 184. Thus, Crume found insufficient similarity between the works at issue to support a claim of infringement, not that plaintiff's work was uncopyrightable. It lends no support to Borland's argument.

<sup>84</sup>J. Woodcock, et al., Computer Dictionary (Microsoft Press, 1991), at 336. Other definitions exist as well. Cf. Emery Dec., ¶¶ 94-95, App. \_\_\_; Galler Dec., ¶¶ 69-70, App. \_\_\_.

<sup>85</sup>The "task" or "function" of the Lotus 1-2-3 menus, as shown above, is to provide information and explanation.

"bright line" rules.<sup>86</sup> The conclusion that a particular element of a work is an unprotectable "system" or "idea" can be reached only after the merger analysis is performed, and the possibility that the work contains expressive elements separable from its "idea" or "system" has been foreclosed. Courts applying Section 102(b) to computer programs and other forms of works alleged to comprise "systems" have consistently followed this approach.<sup>87</sup>

The District Court properly declined Borland's invitation to decide the copyrightability of Lotus 1-2-3's menus based upon a definitional word game. Instead, the District Court examined the program to determine whether its menus and menu tree reflected expression separable from their underlying "system" or functionality, and did so by applying the merger doctrine. Far from violating the principles of Baker v. Selden, the District Court explicitly followed its teaching.

## 2. Baker v. Selden in the computer age.

Borland's contention that the facts here "are identical to" Baker v. Selden (Br. at 43) is both superficial and misleading.<sup>88</sup> Although the cells of an electronic spreadsheet,

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<sup>86</sup>See Nichols v. Universal Pictures Corp., 45 F.2d 119, 121 (2d Cir. 1930) (L. Hand, J.) ("Nobody has ever been able to fix that boundary, and nobody ever can.").

<sup>87</sup>See, e.g., Autoskill, 994 F.2d at 1495 n.23 (rejecting defendant's argument that keying procedure in computer program was an uncopyrightable "method" under § 102(b), and stating that "[w]e must go beyond the literal language of the statute and apply the idea/expression distinction to resolve this issue"); Toro Co. v. R & R Prod. Co., 787 F.2d 1208, 1212 (8th Cir. 1986) (expressive aspects of manufacturer's parts numbering system could be copyrightable); M. Kramer Mfg. Co. v. Andrews, 783 F.2d 421, 434-5 (4th Cir. 1986) (expressive sequences or arrangements in computer videogame copyrightable despite contention that it was a "system or manner of playing a game"); Apple v. Franklin, 714 F.2d at 1250-51 (expressive aspects in computer operating system were copyrightable even though the program could be called a system); Apple v. Formula, 725 F.2d at 524 (that the words of a computer program are ultimately used in implementation of a "process" did not affect copyrightability).

<sup>88</sup>The only "evidence" Borland ever proffered in support of this claim was its so-called "Reply Video", in which an unidentified narrator, aided by unexplained special effects, purported to show what Selden's system would look like as a computer program. Contrary to Borland's assertions (Br. at 8 n.11), Lotus moved to strike the entire Reply Video as incompetent hearsay in the summary judgment briefing. (Dkt. No. 131, App. \_\_\_) Only a "small snippet" (in the words of Borland's counsel) mentioning the Key Reader was admitted for limited purposes at the Phase II trial. (Trial Tr. of 4/2/93, at 3-6, App. \_\_\_)

organized into a grid of horizontal rows and vertical columns, certainly resemble an accounting ledger or any other paper spreadsheet, the similarity ends there.<sup>89</sup>

Contrary to Borland's argument (Br. at 44), the words in Lotus 1-2-3's menus are not analogous to the column headings on Selden's forms.<sup>90</sup> Selden's column headings said things such as "disbursements", "receipts", "totals", and "balances".<sup>91</sup> A Lotus 1-2-3 user who wished to create a similar spreadsheet would physically have to type these headings (referred to as "labels" in the terminology of the program) into the spreadsheet. The menu commands of Lotus 1-2-3 do not actually appear anywhere on a user's spreadsheet and have nothing to do with whatever column headings a user may wish to employ.<sup>92</sup> It would be much more accurate to view the 1-2-3 menus as explaining and presenting to the user precisely those elements of the work that distinguish the electronic spreadsheet from its paper predecessors -- i.e., the ability to copy, move, insert, delete and endlessly reformat the data in a spreadsheet without having to reenter it.

A computer software case presenting a much better analogy to the facts in Baker v. Selden is Brown Bag Software, in which both the copyrighted and allegedly infringing works were outlining programs that performed essentially the same functions, according to "ideas" that

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<sup>89</sup>Lotus has never contended that this spreadsheet layout was protected or protectable by copyright. The District Court expressly excluded such elements from protection in Paperback. 740 F. Supp. at 65-66.

<sup>90</sup>Neither is it the case, as Borland contends (Br. at 6), that Lotus 1-2-3's menus are used to perform arithmetical calculations such as addition or multiplication, or even to perform more elaborate mathematical functions such as calculating "net present values" using the program's "@ functions". The only use one would make of the menus might be to avoid retyping formulas or numbers, by using the "copy" and "move" commands, or to format the appearance of numbers displayed on the spreadsheet.

<sup>91</sup>C. Selden, Selden's Condensed Ledger and Memorandum Book. And Forms of Record, Moore, Wiltach, Keys & Co. (1861 ed.).

<sup>92</sup>The only relationship between menus and spreadsheet column headings is the ability to use menu commands to "copy" or "move" headings from other cells where they had already been entered, or to adjust column widths, or to specify that a label should be aligned right, left or center within a cell.

were "undisputedly identical".<sup>93</sup> The Ninth Circuit held that the menu commands, keystrokes and screen displays of plaintiff's program comprised part of its "expression", comparable to the detailed plot and characters of a play or novel.<sup>94</sup> However, because the defendant's program did not copy those elements, and used a different wording and organization in its menus,<sup>95</sup> there was no infringement.<sup>96</sup>

In this case, Borland infringed not because it copied the spreadsheet "idea" or the Lotus 1-2-3 menu "system", but because it copied the word-for-word expression contained in its menus. This is infringement, under Brown Bag or Baker v. Selden.

D. Borland's Reliance On Ashton-Tate v. Ross is Misplaced

Contrary to Borland's assertion (Br. at 39-41), the Ninth Circuit did not hold in Ashton-Tate that the menu commands and hierarchy of a spreadsheet program are "not protected under federal law". That is not what Ashton-Tate argued, and that is not what either decision in that case concluded.

The issue in Ashton-Tate was whether Ross could claim to be a joint author of Ashton-Tate's "Full Impact" spreadsheet program based upon the fact that, while working on the internal engine of another spreadsheet project, he had shared what he described as certain user interface "ideas and concepts" with a collaborator who went on to create the user interface of the Ashton-Tate product. What Borland likens to the 1-2-3 menu command structure is a single handwritten page, which Ross described as a "list of features," that he had suggested for inclusion during the original project (but which he never participated in implementing in any program). Both the District Court and the Ninth Circuit held that this contribution was not enough to qualify Ross as a joint author of the Ashton-Tate work. Ashton-Tate, 916 F.2d at 521-22.

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<sup>93</sup>Telemarketing Resources v. Symantec Corp., 12 U.S.P.Q.2d 1991, 1994 (N.D. Cal. 1989).

<sup>94</sup>Brown Bag, 960 F.2d at 1475, 1477.

<sup>95</sup>Telemarketing Resources, 12 U.S.P.Q.2d at 1996.

<sup>96</sup>Brown Bag, 960 F.2d at 1473.

The problem with Ross' claim was not that hierarchical menu commands of spreadsheet programs are uncopyrightable, as Borland contends. Rather, Ross failed to prove that his list of suggested functions actually became an original or expressive aspect of a computer program. Ashton-Tate, 728 F. Supp. at 601-2. Borland knows this, since the appellate brief its own counsel wrote for Ashton-Tate pointed out that:

"the arrangement and selection of these commands in the Full Impact product is different from that of Ross' list. Full Impact contains commands absent from Ross' list. Ross' list contains commands absent from Full Impact. The only commands common to both are in an arrangement, order and grouping in Full Impact different from that of Ross' list." (Dkt. No. 108, Ex. C, at 37, App. \_\_\_)<sup>97</sup>

As the District Court observed below, copyrightability decisions tend to be "fact sensitive and case specific." Borland II, 799 F. Supp. at 219-20. The facts of this case and Ashton-Tate are radically different. Moreover, Borland's reading of Ashton-Tate is highly questionable in light of the Ninth Circuit's subsequent decision in Brown Bag, which explicitly stated that menu commands could constitute protectable expression. In sum, neither the Ninth Circuit nor any other court has held that command menus are per se uncopyrightable.

E. Borland's Attack on the District Court's "Methodology" For Determining Copyrightable Subject Matter is Misguided

Contrary to the impression one draws from Borland's brief (and those of certain amici), the issue on this appeal is not whether the "methodology" employed by the District Court is better, worse or essentially the same as that used by the Second Circuit in Altai, or by some other court in another case. Appeals are taken from final judgments and orders -- not from "tests" or "methodologies".<sup>98</sup> The permanent injunction entered here must stand if the decision below reached the legally correct result, regardless of whether this Court ultimately chooses to

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<sup>97</sup>The brief also reveals that, by Ross' own admission, many of the commands on his list were not original because they were "standard Apple commands" prescribed by "Apple's Macintosh interface guide". (Id. at 18, 37)

<sup>98</sup>Fed. R. Civ. P. 54; 28 U.S.C. §§ 1291, 1292.

adopt the test articulated by the District Court or the Second Circuit's Altai test, or instead writes its own, new test incorporating the best features of each. The issue is the outcome, not the "test" employed to get there.<sup>99</sup>

The debate about different "tests" is largely academic for another reason as well. For all the fuss Borland and its amici make about them, they fail to demonstrate that any of the tests or methodologies advanced would lead to the extreme position they have staked out concerning the appropriate boundaries for software copyright protection. Borland's position that software copyright should cover only code, and perhaps detailed structural elements of the code, is derived not from any particular methodology for determining copyrightability but from a mixture of its misreading of the statute and its misguided policy views. No "test" stated by any court to date would support Borland's stunted view of copyright protection for software.

We do recognize that the development of an appropriate "test" for guiding the courts in deciding software copyright cases is a subject that has engaged many thoughtful courts and scholars. Accordingly, we discuss both the District Court's and the Altai test in some detail below, and demonstrate that both tests would result in a finding of infringement here.

I. Choosing the "right" test.

Borland and its amici fault the District Court for using a modified version of the three-part test it developed in Paperback, rather than adopting the three-part "Abstraction-Filtration-Comparison" test adopted by the Second Circuit in Altai. To Borland and its allies, this was the most fundamental error committed below and should be outcome determinative on appeal.<sup>100</sup> However, the test employed by Judge Keeton was a sophisticated and appropriate application of the teachings of Judge Hand and of this Court in Concrete Machinery, which strongly influenced the later tests of Altai and Gates Rubber.

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<sup>99</sup>SEC v. Chenery Corp., 318 U.S. 80, 88 (1943)(a decision correct in result will not be reversed on appeal simply because the district court relied upon a legally incorrect rationale); Helvering v. Gowran, 302 U.S. 238, 245 (1937)(same).

<sup>100</sup>See, e.g., Br. at 27-32; Brief Amicus Curiae of Copyright Law Professors, at 33-42.

Before turning to a comparison of the tests, however, we wish to clarify one potential area of confusion in terminology. Borland places great weight upon the fact that the District Court referred to its test as measuring "copyrightability", while Altai spoke in terms of "substantial similarity". (Br. at 29-30) The District Court concluded that this difference was not significant. Borland II, 799 F. Supp. at 211. To understand why not, one must first focus briefly upon the different meanings that "substantial similarity" can have in the copyright law.

As Judge Keeton explained in Borland I, "substantial similarity" is used to refer to two rather different concepts, often without identifying which is intended. First, "substantial similarity" is used to refer to similarity between the allegedly infringing and infringed works of a sufficient degree (together with proof of access) to create an inference that the former was "copied" from the latter as a matter of fact (as opposed, for example, to being the innocent result of independent creation). Judge Keeton referred to this as "substantial similarity" in the "evidentiary" sense.<sup>101</sup>

The same term is also used to refer to the comparison courts make between the content of the works at issue in order to determine whether the taking of copyrightable material was substantial enough to render the copying "illicit".<sup>102</sup> Judge Keeton referred to this as "substantial similarity in the mixed law-fact sense". Borland II, 799 F. Supp at 212. Since the court must identify at some point, for purposes of comparison, the copyrightable (i.e., protected) elements of the allegedly infringed work, "copyrightability" is a necessary part of any test for "substantial similarity" in this sense.<sup>103</sup> Thus, the distinction between the labels for these tests is more a matter of form than substance.

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<sup>101</sup>As the Tenth Circuit correctly reminds us, this form of "substantial similarity" comparison can include noncopyrightable elements, since such similarities (the proverbial copying of an error or extraneous detail) may support an inference of "copying", even if "illicit copying" or infringement could not be based upon them alone. Gates Rubber, 9 F.3d at 832 n.7.

<sup>102</sup>See Concrete Machinery, 843 F.2d at 608.

<sup>103</sup>For more on the distinctions among different uses of the term "substantial similarity," see A. Latman, "Probative Similarity" As Proof of Copying: Toward Dispelling Some Myths In Copyright Infringement, 90 Colum. L. Rev. 1187 (1990).

In comparing the "tests" used by the District Court in this case and the Second Circuit in Altai, it is also important to recognize that the issues presented in the two cases were meaningfully different, although both concerned copyright protection for nonliteral elements of computer programs, broadly speaking.<sup>104</sup> Altai involved allegations of copying of the internal structure of program code. The factual issue was whether, having admitted to copying an earlier version of its program from plaintiff's program, defendant Altai's new version of its program was (as it claimed) free of the taint of the earlier copying. Since even the new version of Altai's program was similar to plaintiff's program at a structural level, the court had to determine whether those structural similarities were sufficient to prove, as plaintiff contended, that Altai's program was, in fact, the result of copying. Thus, "substantial similarity" (or copying) in the "evidentiary sense" was an important part of the dispute in Altai.

In this case (and in Paperback), on the other hand, the primary issue concerned "substantial similarity" in the "mixed law-fact sense". That is, Borland did not seriously contest the fact that the menus of its "1-2-3 emulation" modes were copied from Lotus 1-2-3. The focus of this litigation (and of the District Court's test) was on whether the elements that Borland copied were protected by copyright and, if so, whether the taking was sufficient in qualitative terms to constitute "illicit copying", or infringement. Moreover, because these elements related exclusively to the program's externals, or user interface, many of the technical constraints that concerned the Altai court were not implicated.

These differences in subject matter largely explain why one court devised a test for "substantial similarity" while the other focused upon "copyrightability". Indeed, that may be the only significance to draw from the distinction.<sup>105</sup>

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<sup>104</sup>The Altai court itself recognized that cases in this field tend to be fact specific, and that the appropriate analysis may depend upon the facts presented. Altai, 982 F.2d at 706. It also expressly excluded computer program screen displays from application of its test. Id. at 703.

<sup>105</sup>See Miller, supra, at 1002-1003; 3 D. Nimmer & M. Nimmer, Nimmer on Copyright (hereinafter "Nimmer"), § 13.03[F][1] at 13-130, n.303.13.

2. The District Court's test.

The first step in the District Court's three-part test<sup>106</sup> attempts to draw a line between a program's unprotected "ideas", "systems", etc., and whatever original expression of that idea it may contain. This step is explicitly drawn from Judge Learned Hand's "patterns of abstractions" test in Nichols. As Judge Hand explained:

"Upon any work, and especially upon a play, a great number of patterns of increasing generality will fit equally well, as more and more of the incident is left out. The last may perhaps be no more than the most general statement of what the play is about, and at times might consist only of its title; but there is a point in this series of abstractions where they are no longer protected, since otherwise the playwright could prevent the use of his "ideas", to which, apart from their expression, his property is never extended." (Nichols, 45 F.2d at 121)

Applying that test, Judge Keeton outlined five different possible levels of abstraction at which one might define the basic "idea" or "system" of the Lotus 1-2-3 menus. They ranged from the most general,<sup>107</sup> to a precise description of every 1-2-3 menu command and detail of menu organization (the definition Borland advocated), which the District Court accurately described as a tautology. Id. For purposes of copyrightability analysis, the District Court chose the second most specific of the five possibilities and identified the "idea" or "system" of Lotus 1-2-3 as follows:

"Its user interface involves a system of menus, each menu consisting of less than a dozen commands, arranged hierarchically, forming a tree in which the main menu is the root/trunk of the tree and submenus branch off from higher menus, each submenu being linked to a higher menu by operation of a command, so that all the specific spreadsheet operations available in Lotus 1-2-3 are accessible through the paths of the menu command hierarchy."  
(Borland II, 799 F. Supp. at 216)

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<sup>106</sup>Promulgated first in Paperback, 740 F. Supp. at 60-61, the District Court modified its test in this action to make it explicit that its screening of unprotectable "ideas" included all matter falling within Section 102(b), such as "systems" or "processes". Borland I, 788 F. Supp. at 89-90.

<sup>107</sup>"Lotus 1-2-3 is an electronic spreadsheet". Borland II, 799 F. Supp. at 216.

At this level of abstraction, another spreadsheet program could offer exactly the same selection of functions as does 1-2-3 without infringing, so long as it used materially different expression for its menus.

The District Court then proceeded to the second step of its test, examining each of the elements of the program tentatively identified as expression to determine which, if any, were "necessary incidents" to the "idea" or "system". Borland II, 799 F. Supp. at 217-19. Applying classic merger doctrine, the District Court examined at length whether the 1-2-3 menu tree was the only way (or one of only a few ways) to express the formulated "idea", or whether the choices made were dictated by function or any other external constraint.

It was this step in the analysis that the District Court concluded it could not resolve without the Phase I trial. Despite the District Court's invitation to do so, Borland failed to prove that any specific element of the 1-2-3 menu tree was functionally dictated or otherwise unprotectable. Considering all the evidence Borland proffered as to supposed functional "constraints" upon the potential range of expression in the 1-2-3 menu tree, the District Court found as trier of fact that:

"the Lotus 1-2-3 menu tree is just one of a great variety of possible expressions that are consistent with the functional considerations listed [by Borland] and the specific set of executable operations used in Lotus 1-2-3." (Borland III, 831 F. Supp. at 213)

Thus, the District Court concluded that the Lotus 1-2-3 menus contained "expression" separable from the program's "idea" (or "system") and were entitled to protection.<sup>108</sup>

The third step in the District Court's analysis was to consider the protected (and copied) elements of Lotus 1-2-3 and to determine whether, taken together, they were

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<sup>108</sup>The District Court was also careful to consider in its analysis the principles applied to find separable expression in purely functional works or "useful articles", even though the statutory definition of "useful articles" pertains only to pictorial, graphic and sculptural works, and does not include computer programs. Borland III, 831 F. Supp. at 212-15; 17 U.S.C. § 101.

qualitatively substantial enough to make their appropriation "illicit".<sup>109</sup> This step of the test was not genuinely disputed below with respect to what Borland copied in its "1-2-3 emulation" menus. Borland II, 799 F. Supp. at 219; see Summary of the Facts, supra, at Section 1.c.<sup>110</sup> The District Court found that the elements of 1-2-3 Borland copied in the Key Reader independently comprised "a substantial part of what a user would think of as constituting the Lotus program." Borland IV, 831 F. Supp. at 235.

### 3. The Altai test.

The first step under the Altai test (as under the Paperback/Borland test) is to apply Judge Hand's "patterns of abstraction" analysis from Nichols to attempt to identify the appropriate framework within which to separate protectable expression from unprotected ideas.<sup>111</sup> Next, the court applies a "filtration" step in which each element of the allegedly infringed program is analyzed to screen out those that are functionally dictated by efficiency or compatibility concerns or by external constraints, or that were taken from the public domain.<sup>112</sup> To this point, both the Altai test and that employed by the District Court examine the infringed work to identify its copyrightable and protected expression. As the District Court explained: "the first two steps of the Second Circuit's 'substantial similarity' test concern what other courts and commentators have called 'copyrightability'." Borland II, 799 F. Supp. at 211.<sup>113</sup>

<sup>109</sup>Concrete Machinery, 843 F.2d at 608. See Whelan, 797 F.2d at 1245 (3d Cir. 1986) ("[T]he court must make a qualitative, not quantitative, judgment about the character of the work as a whole and the importance of the substantially similar portions of the work"); SAS, 605 F. Supp. at 829-30 ("the piracy of even a quantitatively small fragment . . . may be qualitatively substantial").

<sup>110</sup>See also Dkt. No. 359, V:14, Ex. A thereto (Lotus demonstration video).

<sup>111</sup>Altai, 982 F.2d at 706-7.

<sup>112</sup>As David Nimmer, the author of the concept of successive filtration, explains, these filters are simply applications of the traditional copyrightability doctrines of merger and originality (including the scenes a faire doctrine). Nimmer, supra, at § 13.03[F][1], at p. 13-130 & n.303.13.

<sup>113</sup>Or, as the Altai court put it (quoting the Ninth Circuit in Brown Bag): "filtration serves 'the purpose of defining the scope of plaintiff's copyright.'" Altai, 982 F.2d at 707. See also Miller, supra, at 1002-4.

Finally, the third step of the Altai analysis requires a comparison of the protected elements of the infringed work (i.e., those that survived the filtration screening) with the corresponding elements of the allegedly infringing work to determine whether sufficient copying of protected material has occurred to constitute infringement. Although the third step in the Borland analysis asks the same question to determine qualitative substantiality, it does not explicitly involve a comparison of the two works. Such a comparison was unnecessary because the District Court separately found that Borland had produced a "virtually identical copy" of protected elements of 1-2-3.

4. Are Borland and Altai truly at odds?

Thus, it is difficult to see how Borland can insist that these two tests, or even the two decisions, cannot be reconciled. The District Court's test for determining copyrightability is subsumed in the Altai test. The principal difference in stated methodology concerns the third step, and that difference would lead to a different result only if the District Court had somehow neglected to determine that the elements of Lotus 1-2-3 that passed its copyrightability test were in fact copied by Borland. There was no such omission in this case.

Borland prefers the Altai test not because its methodology is drastically different from the District Court's, but because of the Altai court's description of the unprotectable material to be screened in the "filtration" step. In addition to screening out "ideas" and expression "necessarily incidental" thereto, the Altai court mentioned "elements dictated by external factors," including "compatibility requirements of other programs with which a program is designed to operate in conjunction." Altai, at 709-10. For Borland, the key is the reference to "compatibility" -- the ostensible justification for its copying of the 1-2-3 menus. Because it wishes to provide "macro compatibility" with Lotus 1-2-3 in its products, it contends that the 1-2-3 menus should fail the "filtration" screen as articulated in Altai.

Borland's argument must fail because it is applying the compatibility "constraint" to the wrong work. Altai's "filtration" step examines the allegedly infringed program, not the

work of the accused infringer, as part of its test for copyrightability. Assuming, arguendo, that Borland was compelled to copy the Lotus 1-2-3 menus to make its product compatible with 1-2-3 or to meet the external demands of the market, this would be irrelevant to the Altai filtration. It might prevent Borland from claiming that its work was copyrightable, but it does not similarly impede Lotus.

The "filtration" step would serve to screen out the 1-2-3 menus only if Borland could show that at the time 1-2-3 was written, its authors operated under external constraints so stringent that their choices were effectively made for them. Given the opportunity to prove this at trial as to any portion of the 1-2-3 menus, Borland could not. The best it could muster was to point to the alleged constraints that its desire to achieve "macro compatibility" placed upon its products, and then to try to extend those constraints to 1-2-3 itself.<sup>114</sup>

The District Court referred to the "chicken and egg" riddle to explain why this argument is unsound. Borland II, 799 F. Supp. at 212. The Lotus 1-2-3 menus were created before macros written with reference to them were in use. The "external" demands of macro users could not, therefore, have constrained the original menu tree. Its authors could have chosen any set of menu commands, arranged in any conceivable menu hierarchy, and a different macro language would have resulted. This is not to say that once a menu structure is created and macros are written with reference to the keystrokes that correspond to those menus, a link does not develop between the content of the menus and the creation of macros -- obviously it does. But this is because macros are written in reference to the menus, not vice versa.<sup>115</sup>

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<sup>114</sup>That is why Borland, at one stage, attempted to define the relevant version of Lotus 1-2-3 as Release 2.01, and to define its idea as "compatibility with earlier versions of Lotus 1-2-3." Borland II, 799 F. Supp. at 216.

<sup>115</sup>The District Court was sensitive to this point, as it made it clear that it was not protecting 1-2-3's macro language as such, but only that portion of it which employed protected expression in the 1-2-3 menus. Borland II, 799 F. Supp. at 219. Moreover, the District Court properly considered the fact that 1-2-3 users may have created useful macros in reliance on expressive aspects of the 1-2-3 menus to be irrelevant to the copyrightability analysis. Borland IV, 831 F. Supp. at 231-32. That purchasers of a work may apply it to a useful purpose of their own -- for example, developing a large body of notes, outlines or problem sets in reference to a particular textbook -- should not cause the work to lose its copyright protection, or permit a competitor to

5. Both tests produce the same result.

In the end, the tests turn out to be substantially similar. Indeed, Nimmer cites the District Court's test, as enunciated in Paperback, to support the proposition that the Altai test was not a departure from existing law.<sup>116</sup> He described the District Court's test as follows:

"Though phrased as a three-part analysis to determine the copyrightability of the plaintiff's program, rather than a filtering out of uncopyrightable elements from the plaintiff's program as proposed herein, the result of that case's analysis yields a similar result. . . . [The Paperback court's conclusions] harmonize with the successive filtering approach urged herein." (Id.)

Rather than articulate how the different methodologies would have made a difference in the outcome below, Borland concocts a phony doctrinal war among the District Court, the Altai court, and the Third Circuit, whose decision in Whelan v. Jaslow, it contends, stands repudiated in the wake of Altai. This is nonsense. The most fundamental principle for which Whelan stood -- that Congress intended computer programs to be considered as literary works and, accordingly, that copyright should protect their nonliteral elements as well as their literal code -- was embraced by both Judge Keeton and the Second Circuit in Altai. 982 F.2d at 702 ("We have no reservation in joining the company of those courts that have already subscribed to this logic." ).

Whether this Court ultimately concurs in the Second Circuit's criticism of other portions of Whelan, or instead concludes that the Third Circuit's landmark decision has been misconstrued and unfairly attacked,<sup>117</sup> the resolution of that debate can have no impact on the outcome here. The District Court explicitly did not follow the Whelan court on either of the points for which it was criticized in Altai and elsewhere -- namely, for defining each program as having a single "idea" (its function) and concluding that everything which is not essential to that

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copy substantial expression from that work in order to allow those purchasers to preserve their "investment" in it.

<sup>116</sup>Nimmer, supra, at § 13.03[F][1], p. 13-130, n.303.13. See also Miller, supra, at 1001-02.

<sup>117</sup>See Gates Rubber, 9 F.3d at 840. See also Miller, supra, at 996-98, 1006-08.

single idea is necessarily protected expression. Borland II, 799 F. Supp. at 215. To the contrary, both in this case and in Paperback, the District Court identified a number of unprotected "ideas" in the Lotus 1-2-3 user interface -- as the Altai court noted when it cited Paperback with approval for its application of the merger doctrine and its use of the abstractions test. Altai, 982 F.2d at 709.<sup>118</sup>

Indeed, in the most recent appellate decision on this subject, Gates Rubber, the Tenth Circuit had no difficulty in harmonizing the Whelan, Paperback and Altai decisions. 9 F.3d at 840-41. Confronted with many of the same arguments (presented by some of the same amici) made here, the Tenth Circuit ultimately adopted a modification of the Second Circuit's Altai test. It described the Paperback test as a "forerunner" of its own, and perceived the Altai decision as building upon both Whelan and Paperback. Id.

Had the District Court applied the Altai test to the facts of this case, the result would have been the same. After employing an "abstraction" analysis to define the primary "idea" behind the Lotus 1-2-3 menus, the District Court would have proceeded to determine whether their words and organization were either part of the "idea" itself or expression that was "necessarily incidental" thereto. To complete the "filtration" review, the District Court would have examined whether the Lotus 1-2-3 menus were, when written in 1982, dictated by external constraints.

In fact, the District Court tried precisely these questions.<sup>119</sup> Borland failed to prove that the design of the Lotus 1-2-3 menus was "dictated" by anything other than the creative judgments of its authors, whether viewed as a question of merger or of originality. Borland III, 831 F. Supp. at 215-17. Accordingly, it does not matter which test this Court adopts

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<sup>118</sup>Elements that the District Court held unprotected in Paperback include the "idea" of an electronic spreadsheet; the use of a rotated "L" display; and use of the "/" or ";" key to invoke the menu commands. Paperback, 740 F. Supp. at 65-68. In this case, the District Court similarly held that the program's "executable operations" were unprotected. Borland III, 831 F. Supp. at 211.

<sup>119</sup>Borland did not and could not possibly offer any evidence that Lotus 1-2-3's menus were in the public domain or scènes a faire as of the time they were written, so those portions of the "filtration" step would not apply here.

for purposes of resolving this case. On the facts found below, the Lotus 1-2-3 menus comprise copyrightable expression.

F. Compatibility Is No Defense

Borland argues that its copying of the Lotus 1-2-3 menu tree should be excused because the copying was purportedly necessary to achieve "macro compatibility". The law recognizes no such defense, nor should it. To begin with, "compatibility" is a term of vast flexibility. It is used within the software industry in a variety of contexts, to refer loosely to the ability of one program to work with another. There are many types of "compatibility", ranging from the ability of one program to read and write data in the file format of another program (*i.e.*, "file compatibility"), to "keystroke compatibility", a euphemistic way to describe the ability of one program (like the "1-2-3 emulation" modes) to emulate or "clone" the exact keystroke sequences of another program.<sup>120</sup>

Even "macro compatibility", Borland's putative excuse for its infringing behavior, is not an all or nothing proposition -- there are questions of definition and of degree. No two products can be completely or "100%" macro compatible with each other unless they are perfect clones. The addition of a new feature, or virtually any other deviation, can introduce an element of incompatibility -- whether or not the menus are affected.<sup>121</sup> Thus, no version of Quattro or Quattro Pro was ever 100% macro compatible with Lotus 1-2-3, and even successive versions of Lotus 1-2-3 are never 100% macro compatible with each other. The degree of macro compatibility a developer tries to achieve is simply a marketing decision, not a design or engineering necessity. (Emery Dec., ¶¶ 124-125, App. \_\_\_\_).

Thus, neither "compatibility" nor "macro compatibility" is a sufficiently definite concept to provide a rational basis for a defense to infringement, even if copyright law

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<sup>120</sup>See Paperback, 740 F. Supp. at 69-70; Emery Dec., ¶¶ 116-26, App. \_\_\_\_.

<sup>121</sup>As noted previously, there are numerous commands and user interface features in Lotus 1-2-3 that are not reflected in its menus, many of which have counterparts in portions of the 1-2-3 macro language that the District Court did not protect.

recognized such a defense. It does not. In Apple v. Franklin, 714 F.2d at 1245, the defendant claimed that it had to copy certain elements of the operating system for the then "industry standard" Apple II computer in order to create application programs compatible with that computer. The Third Circuit held that goal to be "a commercial and competitive objective which does not enter into the somewhat metaphysical issue of whether particular ideas and expressions have merged." Id. at 1253. Accord, Apple v. Formula, 725 F.2d at 525.

Borland's claim that the Second Circuit's decision in Altai has changed the law in this regard (Br. at 52-54) is once again based upon its fundamental misreading of that decision. The "compatibility requirements" of which Altai spoke were suggested as possible constraints on the copyrightability of the infringed program. The decision said nothing about "compatibility" as an excuse for copying or a defense to infringement. Indeed, to the extent we can follow Borland's argument on this point, it seems to believe that Altai establishes a remarkable new principle of copyright law allowing the infringer to define the scope of protection to be accorded to the infringed work. (Br. at 53) According to Borland, any element the infringer can claim to have copied in the pursuit of "compatibility" with any other program loses its copyright protection as a consequence of the infringer's conduct. Nothing in Altai remotely suggests that it intended that result.

Borland's reliance upon Sega Enterprises Ltd. v. Accolade, Inc., 977 F.2d 1510 (9th Cir. 1993), is equally misplaced. In Sega, the Ninth Circuit addressed the issue of whether, and under what circumstances, the decompilation of a computer program to study its internal workings might qualify as a "fair use". In a very careful and narrowly confined opinion, the court held that when the only way to gain access to and understand the unprotected "ideas" within a program's source code was to decompile it, and the finished program itself did not copy any protected expression from the original, then "intermediate copying" of source code for the sole purpose of studying its "ideas" could qualify as a "fair use". Id. at 1522-27. It is true that the reason given by the defendant in Sega for seeking access to the "ideas" within Sega's program was in order to achieve "compatibility", but the Ninth Circuit certainly did not hold, or

even suggest, that the pursuit of compatibility would excuse (as a "fair use" or otherwise) the wholesale incorporation of expressive elements of a computer program into the finished product of a competitor for that purpose.<sup>122</sup> Bluntly put, the pursuit of compatibility in the quest for larger profits is not now, and never has been, a defense to copyright infringement.<sup>123</sup>

## II

### BORLAND'S USE OF THE LOTUS 1-2-3 MENU COMMANDS AND HIERARCHY WAS NOT A FAIR USE

Borland's "fair use" defense to Lotus' original complaint in this case was both too little and too late. The defense was first argued at a most peculiar time -- during Borland's counsel's summation at the Phase I trial. Borland did not seek leave to offer additional evidence in support. Lotus thereupon moved at trial for judgment on partial findings on the ground that Borland had failed to meet its burden of proof.<sup>124</sup> The District Court granted Lotus' motion from the bench at the commencement of the Phase II trial. The District Court tried Borland's "fair use" defense to Lotus' supplemental complaint in Phase II and similarly ruled against Borland in its subsequent decision. Borland IV, 831 F. Supp. at 240-45.

There can be no doubt that the decisions of the District Court were correct on the record below. As the District Court ruled, none of the four statutory factors enumerated in 17 U.S.C. § 107 supported Borland's defense.

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<sup>122</sup>See also Atari Games Corp. v. Nintendo of America, Inc., 975 F.2d 832, 943 (Fed. Cir. 1992)(intermediate copying permissible as "fair use" only as strictly necessary to understand unprotected ideas of computer program, but not to "profit from replicating" the program's expression).

<sup>123</sup>Indeed, if Borland were so desperate to provide "compatibility" with Lotus 1-2-3, it might have noticed that the terms of the injunction entered against Borland allow it to apply to the District Court at any time for permission to market a compatibility solution upon "specified conditions, including payment of royalties." (Permanent Injunction, ¶ 2(ii)(b)) It has not done so.

<sup>124</sup>As Borland conceded, it bore the burden of proof on this defense. (Trial Tr. of 2/3/93, at 47) Rubin v. Boston Magazine Co., 645 F.2d 80, 85 (1st Cir. 1981) ; Penelope v. Brown, 792 F. Supp. 132, 136 n.5 (D. Mass. 1992).

With respect to the first such factor -- "the purpose and character" of Borland's use -- Borland admitted, and the District Court found, that Borland's use of the 1-2-3 menus in Quattro and Quattro Pro was commercial and competitive in nature. The Supreme Court has made it clear that commercial use of a copyrighted work is presumptively unfair.<sup>125</sup> Moreover, a commercial and competitive use is presumed to have an adverse effect upon the potential market for and value of the infringed work -- the fourth enumerated factor of Section 107.<sup>126</sup> Thus, Borland was required to meet the heavy burden of proving that its use of the 1-2-3 menus had no effect on the market for or value of Lotus 1-2-3.

Borland failed to meet this burden. The "evidence" it proffered consisted primarily of a single newspaper advertisement that Lotus placed in August 1992, to counter Borland's public relations offensive following the District Court's summary judgment decision. (See Exs. 43-46, App. \_\_\_) The ad stated that, as of that time, Borland had "lost in the marketplace" and Lotus 1-2-3 "account[ed] for seven out of 10 new DOS spreadsheet purchases." (Ex. 505)<sup>127</sup> Borland compared this to other Lotus statements concerning its market share (measured in units) during 1988 and 1990, shortly after Quattro and Quattro Pro were released. (Br. at 20-21)<sup>128</sup> The District Court found this evidence insufficient to prove that Borland's conduct caused no competitive injury to Lotus. (Trial Tr. of 3/31/93, at 57)

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<sup>125</sup>Stewart v. Abend, 495 U.S. 207, 237 (1990); Harper & Row, Publishers, Inc. v. Nation Enterprises, 471 U.S. 539, 562 (1985); Sony Corp. of America v. Universal City Studios, Inc., 464 U.S. 417, 449-51 (1984) As the Supreme Court explained, it is not necessary that the sole motive of the use is monetary gain. It is sufficient if "the user stands to profit from the exploitation of the copyrighted material without paying the customary price." Harper & Row, 471 U.S. at 562. See also Weissmann v. Freeman, 868 F.2d 1313, 1324 (2d Cir.), cert. denied, 493 U.S. 883 (1989); Marcus v. Rowley, 695 F.2d 1171, 1175 (9th Cir. 1983).

<sup>126</sup>Sony, 464 U.S. at 451; Supermarket of Homes, Inc. v. San Fernando Valley Bd. of Realtors, 786 F.2d 1400, 1409 (9th Cir. 1986); Financial Information, Inc. v. Moody's Investors Services, Inc., 751 F.2d 501, 509 (2d Cir. 1984).

<sup>127</sup>Lotus' advertisement and the Borland ad to which it responds are attached as Exhibits D and E.

<sup>128</sup>Borland did not show, as it claims here, that Lotus "consistently maintained" this market share throughout the relevant period. (Br. at 58) Borland offered no proof that Lotus' market share remained steady between the points in time it selected.

Simply as a matter of logic, the data Borland proffered could prove no such thing. An assertion concerning Lotus' market share alone says nothing about the profits Borland reaped from its infringement or the reduced profitability Lotus suffered by being forced to compete with an illicit copy of its own work. As the District Court observed, market share cannot be the "final decisive point as to whether there's been some harm, because if the market share has been maintained only in a competitive situation that causes price reduction, that still has a harmful effect." (*Id.*)<sup>129</sup>

Borland submitted the same evidence concerning market share in support of its "fair use" defense to Lotus' Key Reader claim. This evidence had absolutely no probative value in this context. The revised versions of Borland's products which relied exclusively upon the Key Reader for so-called "macro compatibility" were not yet released when the Lotus advertisement appeared. The District Court clearly did not err in finding that "Borland's limited evidence concerning market share is entirely insufficient to demonstrate" that Lotus had not been, nor would be in the future, harmed by the Key Reader. Borland IV, 831 F. Supp. at 244.

The District Court also considered the second and third factors enumerated in Section 107, together with all other factors Borland suggested, and found that each either weighed against Borland or was entitled to little weight.<sup>130</sup> Examining all the factors together, the District Court concluded that Borland's copying of the 1-2-3 menus in its products in order to

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<sup>129</sup>See American Geophysical Union v. Texaco Inc., 802 F. Supp. 1, 20 (S.D.N.Y. 1992) (Leval, J.) ("the copyright owner is not required to demonstrate that it has been reduced to poverty by the defendant's copying. . . . The fact that the copyright owner is realizing rich profits from the exploitation of its copyrights despite the unauthorized copying has no logical tendency to prove that the secondary user's copying is not diminishing those profits. ")

<sup>130</sup>Concerning the second factor -- the "nature of the work" -- the District Court found that the 1-2-3 menu tree was expressive in nature and not merely functional or utilitarian. (Trial Tr. of 3/31/93, at 54; Borland IV, 831 F. Supp. at 242-43) Copying of its expression was "not remotely necessary for disseminating" the underlying "idea" of the work. Borland IV, 831 F. Supp. at 243. Nevertheless, comparing the 1-2-3 menu tree to a "factual work", it concluded that the factor "does not weigh significantly in either party's favor." *Id.* Concerning the third factor -- the "amount and substantiality of the taking" -- the District Court found that Borland incorporated in its products a "virtually identical copy" of the 1-2-3 menu tree. It disregarded as legally irrelevant Borland's argument purporting to compare the amount that it took to the entirety of its infringing works. *Id.*, citing Harper & Row, 471 U.S. at 565.

gain an advantage in its competition with Lotus was not a "fair use". (Trial Tr. of 3/31/93. at 57; Borland IV, 831 F. Supp. at 244-45)

Neither Sega nor Galoob v. Nintendo<sup>131</sup> supports Borland's argument. (Br. at 56-57). Far from suggesting that a commercial use of another's computer program is presumptively fair unless the market for the original is "supplanted" or destroyed, as Borland contends, both cases are careful to establish that the defendant did not, in fact, incorporate a copy of the original in a directly competitive product.

In Sega, as noted above, the issue was whether defendant Accolade's "intermediate copying" of copyrightable elements of Sega's program in order to create non-infringing products for eventual public sale could be excused as a "fair use". Finding that Accolade's "direct purpose in copying Sega's code, and thus its direct use of the copyrighted materials, was simply to study the functional requirements for Genesis compatibility so that it could modify existing games and make them usable with the Genesis console", the court concluded that "the use at issue was an intermediate one only and thus any commercial 'exploitation' was indirect or derivative."<sup>132</sup>

In Galoob, the product at issue, the "Game Genie", worked with Nintendo's videogames to allow users to devise variations upon their play sequences. The court noted that the Game Genie was "useless by itself, it can only enhance, and cannot duplicate or recast, a Nintendo game's output." Galoob, 964 F.2d at 969. Thus, Nintendo did not allege that the Game Genie directly infringed its copyright, but rather accused Galoob of contributing to the creation of unauthorized derivative works by users. Id. at 970. As the District Court noted (Borland IV, 831 F. Supp. at 241-42), the Galoob court focused on whether the private, non-commercial use of the Game Genie by individual users was a "fair use" and, concluding that

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<sup>131</sup>Lewis Galoob Toys, Inc. v. Nintendo of America, Inc., 964 F.2d 965 (9th Cir. 1992), cert. denied, \_\_\_ U.S. \_\_\_, 113 S. Ct. 1582 (1993).

<sup>132</sup>Sega, 977 F.2d at 1522.

it was, held that Galoob could not be held secondarily liable for "contributing" to a use that was "fair". Id.

There is no issue in this case concerning intermediate copying, contributory infringement or the actions of end users.<sup>133</sup> Borland was found liable for its own conduct in copying Lotus' work and incorporating that copy as a prominent feature of the products it sold to the public. The District Court correctly held that no "fair use" defense could be sustained on this record.

### III

#### THE DISTRICT COURT DID NOT ERR IN FINDING THAT BORLAND FAILED TO SUSTAIN ITS DEFENSES OF WAIVER, LACHES AND ESTOPPEL

Borland mentions various of its other equitable defenses in the argument headings of its brief (at 58-59), but argues only two on appeal: laches (with respect to Lotus' original claim) and waiver (with respect to the Key Reader claim only). Accordingly, its other purported defenses are abandoned.<sup>134</sup> The District Court's rulings on both defenses that Borland does argue here were fully supported by findings of fact made after trial, which are not clearly erroneous.

#### A. Laches.

To sustain a laches defense, Borland had the burden to prove (1) that Lotus unreasonably delayed in bringing this action, and (2) that Borland was prejudiced by this delay.

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<sup>133</sup>The suggestion in the User's Group Amicus Brief that end users of Lotus 1-2-3 may somehow be liable for copyright infringement for having written 1-2-3 macros is ill-founded. Not only has Lotus made it clear, from the outset of this litigation, that it has no quarrel with Borland's customers (much less Lotus' own), but the licenses users acquire when they purchase Lotus 1-2-3 clearly encompass the right to create macros. Were any of this subject to doubt, end users could also count on the protection of the "fair use" defense which, although unavailable to Borland, would surely protect an end user's private, noncompetitive use of 1-2-3's macro language. See Sony, 464 U.S. at 451; Galoob, 964 F.2d at 970.

<sup>134</sup>Ryan v. Royal Ins. Co. of America, 916 F.2d 731, 734 (1st Cir. 1990) ("issues adverted to on appeal in a perfunctory manner, unaccompanied by some developed argumentation, are deemed to have been abandoned").

Costello v. United States, 365 U.S. 265, 282 (1961). Based upon the Phase I trial record, the District Court found that Borland proved neither element of the defense.

Concerning Lotus' alleged "delay" in filing suit, the District Court found that Lotus delayed "for the purpose of awaiting resolution of the Paperback and Mosaic cases", bringing this action promptly (the second business day) thereafter. Borland III, 831 F. Supp. at 219.<sup>135</sup> Lotus' goal of avoiding needlessly duplicative litigation was not unreasonable.<sup>136</sup> Id. Although the District Court rejected Borland's legally erroneous argument that Lotus was required to give Borland notice in advance of filing suit,<sup>137</sup> it found, in all events, that Lotus reasonably believed that Borland was aware of Lotus' potential claims and thus needed no notice. Borland III, 831 F. Supp. at 220.<sup>138</sup>

Concerning alleged "prejudice" to Borland, the District Court found that Borland had failed to prove that it took any action in reliance on Lotus' delay in bringing suit. Id. at 221. Given that Borland's infringing conduct began before Lotus knew anything of Borland's plans, and that it continued for years after Lotus did sue, Borland could not credibly make such a

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<sup>135</sup>This "delay" was shorter in duration than the statutory limitation period specified in 17 U.S.C. § 507.

<sup>136</sup>Borland persistently misquotes the testimony of Lotus witnesses to suggest that their reason for deferring this litigation was to see if Quattro would be a commercial success. (See, e.g., Br. at 16-17, 59) Lotus' executives testified that one factor they considered in determining whether to commence duplicative litigation was the possibility that Quattro would fail on its own, but none testified that that was their only, or even principal reason. (Lemberg Dec., ¶¶ 4-5, App. \_\_\_; Manzi Tr. at 24-27, App. \_\_\_; Digate Tr. at 22-25, 51-52, App. \_\_\_)

<sup>137</sup>Unlike patent law, copyright damages are not limited to the period after notice is given. Cf. 35 U.S.C. § 287.

<sup>138</sup>Lotus knew that Borland's chairman, Philippe Kahn, had engaged in a diatribe against Lotus' filing of the Paperback action, which in his view "all boils down to keystroke [sic] compatibility and macro compatibility" -- both of which were later provided in the Quattro product. (Ex. 41, App. \_\_\_; Lemberg Dec., ¶ 7, App. \_\_\_; Manzi Tr. at 32-33, App. \_\_\_)

showing.<sup>139</sup> To the contrary, Borland relied not on Lotus, but on an opinion of counsel it obtained prior to publication of Quattro. (Kohn Dec., Ex. C. App. \_\_\_\_; Kohn Tr. at 65-66, 85-90, App. \_\_\_\_.) Like Lotus, Borland then awaited the outcome of the Paperback case before commencing its own declaratory judgment action. Borland III, 831 F. Supp. at 221. Again, these findings are not erroneous, much less clearly so, and the District Court properly rejected Borland's laches defense.

B. Waiver (Key Reader only).

To demonstrate that Lotus waived its claims against the Key Reader, Borland had the burden to prove that Lotus intentionally relinquished a known right with knowledge of its existence and the intent to relinquish it. CBS, Inc. v. Merrick, 716 F.2d 1292, 1295 (9th Cir. 1983). Borland failed to do so.

On appeal, Borland cites only one Lotus statement as evincing such a waiver -- a response to a request for admission served in April 1991. (Br. at 62-63) The District Court found that Lotus' response to that request sufficiently demonstrated Lotus' intention to pursue claims against a program that, like the Key Reader, used a copy of the 1-2-3 menu structure to execute macros. Borland IV, 831 F. Supp. at 236.<sup>140</sup> Moreover, another response from the same document shows that Lotus was not yet aware of the Key Reader's existence. (Dkt. No. 359, VII:A7, at No. 31, App. \_\_\_\_.) As the District Court found, Lotus could not knowingly have waived a claim it did not know existed. Borland IV, 831 F. Supp. at 236; see CBS, 716 F.2d at 1295.

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<sup>139</sup>Borland's claim to have demonstrated that it would not have invested "millions of dollars in acquiring and developing the technology incorporated into Quattro Pro" (Br. at 61) is belied by the testimony of its affiant on the point -- its general counsel, Robert Kohn -- who admitted at deposition that he could not identify any particular part of the investment that was made with respect to the infringing portion of the product, or that would be wasted if the infringing portion was removed. (Kohn Tr. at 227-30, 236-42, App. \_\_\_\_).

<sup>140</sup>As noted above, the Key Reader does, in fact, contain a modified version of the same copy of the 1-2-3 menu tree that Borland used to generate the "1-2-3 emulation" menus in earlier versions of its products.

The District Court rejected Borland's unsupported assertion that Lotus knew of the Key Reader but was "lying in the weeds" with respect to its claims.<sup>141</sup> Lotus' intentions and state of mind were disputed, contrary to Borland's assertion (Br. at 62), and the District Court's findings on that factual issue were not clearly erroneous. The District Court correctly held that Lotus did not knowingly and intentionally waive its right to pursue claims against the Key Reader.

#### IV

### CONGRESS STRUCK THE CORRECT BALANCE IN PROTECTING COMPUTER PROGRAMS BY COPYRIGHT

Ultimately, this appeal has less to do with differing views as to what the law is, than fundamentally conflicting concepts of what the law ought to be. We believe that Congress spoke in a clear and unequivocal manner when it mandated that computer programs are to be protected as literary works under the Copyright Act, extending protection to both their literal and nonliteral elements, and directing that the line between their protectable original expression and their unprotected "ideas" and "systems" should be determined, on a case-by-case basis, following traditional copyright law principles such as merger. Since 1976, the courts have attempted to honor this congressional mandate by applying familiar legal principles in sometimes unfamiliar factual terrain. That the resulting decisions do not always speak with one voice, or appear entirely consistent in methodology, is unsurprising. Each time copyright law has been extended to cover a new form of authorship, a similar period of adjustment has occurred. Because decisions in this area of the law tend to be fact-specific, some seeming inconsistency in results is also unavoidable. None of this is evidence (as Borland and its amici seem to believe) of judicial disarray. Rather, as the recent Gates Rubber decision reflects, a new synthesis is emerging. We

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<sup>141</sup>To the contrary, Lotus expressly stated its intention to reserve the right to pursue such claims in the course of the summary judgment briefing below, as Borland acknowledged at the time. (Dkt. No. 120 at 40, n.22, App. \_\_\_; Dkt. No. 171 at 43, n.54, App. \_\_\_; Dkt. No. 183 at 25, n.11, App. \_\_)

believe that the regime Congress envisioned for protecting innovative new works of software under copyright law is working, and working well. See Miller, *supra*, at 998-1001.

But Borland and its amici share a radically different view. Whether driven by a profit-oriented belief that they have more to gain by imitating others than to lose by being imitated, or simply as a matter of principle, they all contend that protection for software must be more narrowly restricted. Although no court has ever adopted their interpretation, they contend that copyright law should only protect a program's source and object code -- i.e., its "internals", which a user typically never sees or knows about. To appear more moderate, they suggest that aspects of a program's user interface might, in rare instances, be protected as an "audiovisual work", but as a practical matter they believe that user interfaces containing words ought not to be protected at all.

A good illustration is the argument of Borland and certain of its amici that the Lotus 1-2-3 menus should be protected, if at all, under the patent law rather than copyright. Lotus stands accused of seeking, and the District Court is condemned for supposedly granting, "patent-like protection" in return for a \$20 copyright registration fee. But imagine what the world would look like if they were correct. If Lotus (or the makers of VisiCalc) had actually sought and secured a patent covering a spreadsheet program's menus and user interface, there would be no other spreadsheet programs on the market today (at least not without a license). Unlike copyright law, which only requires that subsequent authors do their own work and avoid copying, patent law prevents all who come later from using the protected process, even if they have found their own original ways to implement it and even if their work was done without knowing anything about the patent or what it covered. Incredibly, those who complain here that permitting copyright protection for Lotus 1-2-3's menus would somehow restrict competition propose the vastly more preclusive alternative of patents as their preferred solution.

But they do not mean it. Borland and its amici do not genuinely believe that creative and original user interfaces can or likely will receive patent protection. They only pretend so to make it seem that their true objective is clarification of the appropriate legal

framework.<sup>142</sup> Arguing that Lotus should lose because it chose the wrong form of intellectual property protection sounds so much more reasonable than an honest admission of opposition to all protection for user interfaces that neither sing nor dance.

This is not to suggest that all the arguments made by the amici are cynical or unsympathetic. For example, certain amici seek the comfort of a "bright line" test so that they may work without fear of being accused of copyright infringement.<sup>143</sup> Unfortunately, the only "bright line" in copyright law is the safe harbor provided to one who does not copy another's work. Those who want to copy as much as they can without breaking the law are left to wrestle with Judge Hand's conclusion, reached after more than thirty years of judging, that decisions "as to when an imitator has gone beyond copying the idea and has borrowed its 'expression'" must "inevitably be ad hoc." Peter Pan Fabrics, Inc. v. Martin Weiner Corp., 274 F.2d 487, 489 (2d Cir. 1960). This places software developers in no worse position than other authors or composers. And it is certainly not the case that rejecting Judge Keeton's three-part test for Altai's would in any way simplify the inquiry, much less provide the "bright line" they seek.

One might also feel some natural sympathy for the Users Groups, who complain that enforcing Lotus' 1-2-3 copyrights interferes with their ability to use macros they created with 1-2-3 in other spreadsheet products. For reasons explained above, they have no reason to fear that they infringe Lotus' copyrights by writing and using their own macros. But nothing Lotus has ever said or done could have led these users to believe that they ever would be able to use 1-2-3 macros with other spreadsheet programs. Moreover, many of their articulated

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<sup>142</sup>Indeed, Professor Samuelson, the principal author of the Copyright Law Professors' brief, has written numerous articles arguing that virtually every pro-protection copyright event from CONTU to date was wrong. See Miller, supra, at 980 n.6. Professor Samuelson's proposed solution is the enactment of new legislation to create a weaker sui generis form of protection. See Benson Revisited: The Case Against Patent Protection for Algorithms and Other Computer Program Related Inventions, 39 Emory L.J. 1025, 1148-53 (1990). Obviously, before one can persuade Congress or industry that a whole new legislative scheme is necessary, one must first demonstrate that the existing law does not work. See also A.L. Clapes, Softwars: The Legal Battle for Control of the Global Software Industry (Quorum Books, 1993), at 293-94.

<sup>143</sup>Brief of Amicus Curiae Software Entrepreneurs' Forum, at 3.

concerns arise from a basic misunderstanding of the law. In particular, their argument that protecting 1-2-3's menus must be an error because it interferes with their free use of their own, possibly copyrightable macros with other programs, finds no support in copyright law. That an author may use another's copyrighted work to create a different work worthy of copyright protection is not unusual. For example, one may produce an independently copyrightable television performance or motion picture, which is based upon a copyrighted play (or screenplay), taken from a copyrighted novel. Notwithstanding the original and protectable creative effort of the movie or television producers and performers, there is no doubt that their ability to use and exploit their work depends upon securing the necessary rights and licenses from all those whose own copyrighted works are also employed.

The Computer Scientists approach the issue from a different perspective. They contend that the District Court erred by providing protection to what they characterize as a "programming language", and they predict "catastrophic" consequences if the decision stands. (Computer Scientists' Br. at 1) As is true of many of the amici's arguments, this issue was not raised by Borland, either in the court below or on appeal, and the supposed facts upon which it is based are nowhere to be found in the record. Accordingly, this issue is not properly before the Court. Nonetheless, these amici insist as a matter of definition, if not law, that 1-2-3 is a programming language, and that programming languages cannot be protected by copyright.

Had the issue been raised below, Lotus would have shown (as it did in Paperback) that (1) the Lotus 1-2-3 menus are not and never were intended to be a general purpose programming language such as Fortran or C, (2) the term "programming language" is too vague and indeterminate to serve as a statutory boundary between the protected and unprotected, and (3) despite the assumptions of the amici, there is no authority for the proposition that an original programming language could not be protected by copyright.<sup>144</sup> Moreover, the District Court was quite careful to make it clear that it was not protecting the 1-2-3 macro language, as a language,

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<sup>144</sup>See Hartfield v. Peterson, 91 F.2d 998 (2d Cir. 1937)(A. Hand, J.) (holding telegram and cable code protectable); Reiss v. National Quotation Bureau, 276 F. 717 (S.D.N.Y. 1921) (L. Hand, J.) (same).

but only to the extent that it is derived from protected expression in the 1-2-3 menus.<sup>145</sup> Thus, the entire argument has no relevance here.

In the end, Borland and its amici are effectively lobbying the Court to substitute its own judgment for that of Congress as to the appropriate scope of copyright protection for computer software. Even if this Court had the authority to overrule Congress on this point, Borland's invitation is one the Court ought to decline.

Those who question the wisdom of Congress' decision to provide strong and effective copyright protection for computer software are poor students of history. Since adoption of the 1976 Copyright Act, the software industry has been one of this nation's most outstanding economic success stories. This industry represents one of the very few in which the products created by United States firms are world-wide best sellers. As programming techniques have become more widely known (and even automated), ever increasing proportions of the creative effort in software development have been devoted to designing the user interfaces that will make the use of personal computers easy and attractive for millions of new users each year.

One need only spend a few minutes browsing in any software store to appreciate the rich abundance of programs, of all types and to serve all purposes, that have resulted from the creative efforts of software developers across the land. The programmers and entrepreneurs (and their investors) responsible for this product development rely upon the knowledge that the original fruits of their labor will receive the full protection of the copyright law. Indeed, one major bipartisan objective of United States trade policy has been to ensure that our trading partners provide effective copyright protection to software created in this country and sold overseas. Anyone trying to prove that the protection of the Copyright Act has not played an important role in bringing about the phenomenal growth and productivity of this industry has a long uphill battle.

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<sup>145</sup>See Borland II, 799 F. Supp. at 219 ("the macros and keystroke sequences are protected to the extent it is necessary to infringe a copyright to use them").

But Borland and its allies have taken on an even heavier burden. They argue that providing effective copyright protection for elements of a program other than its source and object code will smother innovation, stifle competition and bring the computer industry to its knees. So said Paperback Software in 1990. Where is the evidence of this disaster? Certainly not in the record below. There is no evidence in the record of any adverse impact upon either competition or innovation. Neither is there any empirical support for Borland's "Chicken Little" claims, even with respect to its own products. To the contrary, Borland proclaimed to the world that it sold more than 500,000 copies of new, non-infringing versions of Quattro Pro in the first six weeks after the permanent injunction was entered.<sup>146</sup>

Whelan was decided by the Third Circuit in 1986 and Lotus sued Paperback Software in January 1987. During the years since, numerous decisions protecting non-literal aspects of computer programs were issued by Federal courts across the country.<sup>147</sup> Surely if Borland were right, some evidence to support its theory would have emerged. Instead, those years have brought record growth and prosperity in the software industry. Legal developments may have helped to prevent the software business from becoming the domain of cheap software clones, but one cannot claim that either competition or innovation suffered as a result, without depriving those words of all meaning.

In sum, the decision by Congress to provide strong and effective protection to original computer software has proven correct over time, and it has served the software industry and the nation well. There is neither a right nor a reason to change course now.

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<sup>146</sup>According to Philippe Kahn, Borland's chairman, "Our numbers are staggering. This program is selling like hotcakes." "Borland's Quattro Pro is 'Selling Like Hotcakes'", Wall St. J., Nov. 11, 1993, at B6.

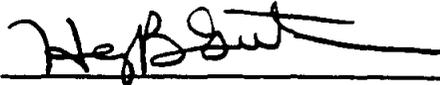
<sup>147</sup>See, Section IB, supra.

CONCLUSION

For the foregoing reasons, Lotus respectfully requests that the injunction entered below be sustained in all respects.

Dated: January 28, 1994

Respectfully submitted,



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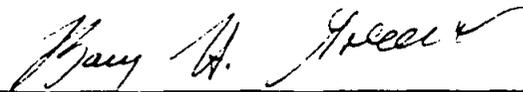
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Certificate of Service

I hereby certify that a true copy of the forgoing was served on counsel of record for Defendant/Appellant herein by hand and overnight courier on January 28, 1994.

FACSIMILE



IN THE  
UNITED STATES COURT OF APPEALS  
FOR THE FIRST CIRCUIT

No. 93-2214

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LOTUS DEVELOPMENT CORPORATION,

*Plaintiff/Appellee,*

v.

BORLAND INTERNATIONAL, INC.,

*Defendant/Appellant.*

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APPEAL FROM THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MASSACHUSETTS  
HONORABLE ROBERT E. KEETON, JUDGE

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BORLAND INTERNATIONAL, INC.

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## INTRODUCTION

Lotus claims that the copyright law precludes Borland and similarly situated companies from producing compatible products, even when such products use original code and original screen displays. Lotus does not quarrel with Borland's assertion that the lower court weighed the interests of authors more heavily than those of users or competitors, or that the lower court used the copyright law to protect a "first-comer's" installed base (i.e., those customers who chose the product of the first successful entrant to the market) from competition by later entrants with superior products. Lotus does not take issue with Borland's analysis of the legislative history underlying § 102, nor does Lotus challenge the notion that its own interpretation of copyright law would provide a patent-type, government-sanctioned monopoly to first-comers. Rather, Lotus embraces all of these results. Lotus argues that compatibility should be no defense at all to a charge of infringement, even if compatibility is achieved, as here, without copying any code. Lotus Br. at 49.

In Lotus' view, users who were "locked in" by their creation of macros and development of skill sets based upon the Lotus language must tolerate inferior products or bear the high costs of rewriting macros and relearning keystroke combinations in order to switch products. Lotus Br. at 17, 48. In the view of the few large companies that support Lotus, an installed base of "locked-in" consumers can be exploited by the first successful company to market without meaningful competition. Facing a comparable argument in Eastman Kodak, the Supreme Court held that precluding competition in the "after market" for the business of locked-in consumers states a prima facie case for antitrust liability.<sup>1</sup> Yet Lotus and the few large companies that support it now claim a government-sanctioned right to exploit locked-in consumers in exactly the same way.

Perhaps, if Lotus had demonstrated a contribution to the prior art sufficient to satisfy the exacting standards of letters patent, it would be entitled to such a government-sanctioned monopoly. Perhaps, if Lotus could demonstrate that Borland copied code, Lotus would be entitled to preclude Borland from competing for the business of 1-2-3 users. But in the absence of either a patent or proof of code copying, the suggestion that

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<sup>1</sup> Eastman Kodak Co. v. Image Technical Servs., Inc., -- U.S. --, 112 S. Ct. 2072, 2087-88 (1992).

Lotus receives protection from competition merely by paying \$20 and filing a Form TX in the Copyright Office is simply overreaching.

So overreaching is Lotus' position, in fact, that no trade association would support it. Even CBEMA, the association of hardware manufacturers, "does not attempt to suggest to this Court whether or not the menu commands in Lotus 1-2-3 contain copyrightable subject matter." CBEMA Br. at 7. Of the 26 members of CBEMA, only four were willing to sign a separate brief more clearly calling for expanding the scope of copyright protection.<sup>2</sup> The few companies that support Lotus are "first-comers" to a particular market and seek to inhibit competition from the hundreds of other operating system and application software companies.

The only policy basis articulated by Lotus and the "first-comer" amici to justify patent-type protection through copyright registration is the assertion that broadening the scope of copyright protection is necessary to keep the American software industry ahead of the rest of the world. Lotus Br. at 61-62; Brief Amici Curiae of Apple, DEC, IBM and Xerox ("IBM Br.") at 2-3, 28-29. But the facts are otherwise. Among the chief beneficiaries of overly broad software protection are large offshore companies which have, since Whelan, brought copyright suits in U.S. courts attempting to put small U.S. companies out of business.<sup>3</sup>

Borland's amici, on the other hand, represent American interests. They are not concerned about the effect of the lower court's decisions on Borland; they are concerned about the effect of those decisions on themselves and others in the software industry. These interests include large American companies such as ACIS members Sun Microsystems, Unisys and NCR (the computer subsidiary of AT&T), as well as small American entrepreneurs, software developers and computer scientists. Reversal is necessary to protect all of these American interests.

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<sup>2</sup> Most of those companies urging this Court to adopt a broad scope of copyright protection are asserting or have asserted broad copyright claims against competitors in other court actions in attempts to preclude competition. See, e.g., Allen-Myland, Inc. v. International Business Machines Corp., 746 F. Supp. 520 (E.D. Pa. 1990); Apple Computer, Inc. v. Microsoft Corp., 799 F. Supp. 1006 (N.D. Cal. 1992); Computer Associates Int'l, Inc. v. Altai, Inc., 982 F.2d 693 (2d Cir. 1992).

<sup>3</sup> See, e.g., Sega Enters., Ltd. v. Accolade, Inc., 977 F.2d 1510 (9th Cir. 1992); Lewis Galoob Toys, Inc. v. Nintendo of America, Inc., 964 F.2d 965 (9th Cir. 1992).

This point has not been lost on those charged with framing and enforcing this country's competition policy. In a major policy speech marking the 60th anniversary of the founding of the Antitrust Division, the Division's Head, Assistant Attorney General Anne K. Bingaman, expressly noted the "important competitive implications" and the "important implications for incentives to innovate" that are affected by "the scope of copyright protection for computer software." Calling out Lotus v. Borland by name, the Assistant Attorney General stated:

Given my strong belief in competition, I think courts should be hesitant to read the statutory grant of provisions expansively, but should recognize the anticompetitive potential of restrictive practices at or beyond the borders of the clearly conveyed statutory rights.<sup>4</sup>

Contrary to the suggestion of Lotus and those of the IBM brief, the American software industry has not prospered because of or even during "the regime" of overly broad copyright protection. See IBM Br. at 28. For virtually the industry's entire history and throughout most of the country, the law has favored interoperability and appropriately circumscribed the scope of copyright protection. The case law applying copyright law to computer software did not begin with Whelan. Rather, throughout most of the industry's lifetime, software companies relied upon Judge Patrick Higgenbotham's Synercom decision denying copyright protection to input formats<sup>5</sup> to provide guidance for the development of compatible yet noninfringing software. It was under this "regime" that the industry, including the industry of IBM-compatible computer manufacturers, grew and flourished. The Whelan decision's rejection of Synercom,<sup>6</sup> almost ten years later, provoked a firestorm of controversy. Whelan was heavily criticized and ultimately rejected by the Second, Ninth, Tenth and Federal Circuits. In short, Altai is not a departure that might adversely affect the industry. It is a return to the status quo ante under which the industry flourished.

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<sup>4</sup> Assistant Attorney General Anne K. Bingaman, Address Before the Celebration of the 60th Anniversary of the Founding of the Antitrust Division (Jan. 10, 1994), reprinted in 47 Pat., Trademark & Copyright J. (BNA), at 254 (Jan. 20, 1994).

<sup>5</sup> Synercom Technology, Inc. v. University Computing Co., 462 F. Supp. 1003 (N.D. Tex. 1978).

<sup>6</sup> See Whelan Assocs., Inc. v. Jaslow Dental Lab., Inc., 797 F.2d 1222, 1239-1240 (3d Cir. 1986).

## I. THE LOTUS MENU WORDS AND ORDER ARE UNCOPYRIGHTABLE.

### A. Baker Stands for a Number of Fundamental Principles, Not Just Merger.

The only real issue in this case is the application of Baker v. Selden and its progeny to the Lotus menu command hierarchy.<sup>7</sup> Lotus reads Baker v. Selden to stand only for the proposition that "merged" expression (expression that can be stated in only a limited number of ways) is uncopyrightable. Lotus Br. at 32. According to Lotus "choice is the 'touchstone' of merger analysis." Id. Choice is the touchstone of merger, but choice is not the touchstone of copyrightability. Baker v. Selden specifically, and copyright law generally, "mean more than the merger doctrine for functional features." Karjala-Menell Br. at 16. There are, quite literally, scores of cases and articles that state, support and explain this proposition.

Baker v. Selden was the seminal case that established the dividing line between the scope of patent protection and the scope of copyright protection.<sup>8</sup> From the Baker v. Selden analysis, successive judicial interpretation spawned a number of delimiting concepts, among which is "merger."

Baker v. Selden spawned several overlapping lines of authority on what aspects of a copyrighted work a copyright will not protect. The most straightforward application of Baker v. Selden denies copyright to blank forms. A second line of cases denies copyright protection to utilitarian articles. The third, most fundamental line of authority prohibits copyright protection for ideas, theories, processes, or systems. The fourth outgrowth of Baker v. Selden is known as the merger doctrine.<sup>9</sup>

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<sup>7</sup> Lotus does not dispute the fact that the lower court decided the issue of the menu command hierarchy's copyrightability on summary judgment. See, e.g., Procedural Order at 18 ("The menu commands and menu command hierarchy of Lotus 1-2-3 have expressive aspects and are copyrightable"). Nor does Lotus dispute that the standard for review of summary judgment is de novo review. Therefore, Lotus' assertion that the lower court's factual findings "may not be disturbed unless clearly erroneous," Lotus Br. at 2, is correct but irrelevant.

<sup>8</sup> See, e.g., Atari Games Corp. v. Nintendo of America, Inc., 975 F.2d 832, 839 (Fed. Cir. 1992) ("patent and copyright laws protect distinct aspects of a computer program"); Taylor Instrument Cos. v. Fawley-Brost Co., 139 F.2d 98, 99-100 (7th Cir. 1943); Brief English Sys., Inc. v. Owen, 48 F.2d 555, 556 (2d Cir. 1931).

<sup>9</sup> J. Litman, The Public Domain, 39 Emory L. J. 965, 981 (1990) (footnotes omitted). See also Digital Comm. Assoc., Inc. v. Softklone Distrib. Corp., 659 F. Supp. 449, 457 (N.D. Ga. 1987) (Baker stands for "two separate propositions," merger being a "corollary" of one of them); P. Samuelson, Computer Programs, User Interfaces, and Section 102(b) of the Copyright Act of 1976: A Critique of Lotus v. Paperback, 6 High Tech. L. J. 209, 228 & n.81 (1991) (noting six separate copyright doctrines from Baker); E. Samuels, The  
(continued...)

In short, Baker is not synonymous with just the merger doctrine.<sup>10</sup> All of the various Baker doctrines, not just merger, are to be applied to computer programs. For example, the Tenth Circuit, following Altai, has applied both the "idea-expression dichotomy" and the "process-expression dichotomy," as well as merger, to the copyrightability analysis of a program's non-literal elements. See Gates Rubber, 9 F.3d at 836-838. In this case, it is the seminal analysis of Baker, separating patent law from copyright law, rather than Baker's subsequent application to merger, that is at issue.

The Baker analysis drew a line between patent and copyright protection, forever establishing that a plaintiff cannot secure patent-like protection through copyright. It was clear in Baker, as it is here, that the plaintiff's abstract system of accounting was uncopyrightable. It was equally clear in Baker that the plaintiff's book was copyrightable, just as it is clear that the Lotus user manual, help screens and computer code are copyrightable. The difficult issue in Baker – the same issue present here – is whether the words through which the system was implemented, the words on Selden's forms, the words "necessarily incidental" to Selden's system, were to be considered part of the uncopyrightable system. The Baker court answered that question in the affirmative. See, e.g., Altai, 982 F.2d at 704 (citing Baker, 101 U.S. at 104).

The Baker analysis focused on the plaintiff's words, not those of the defendant. The Baker analysis holds that if the plaintiff's system is implemented through words, the words used by the plaintiff to invoke or implement the system are uncopyrightable – whether or not the plaintiff could have used other word choices to implement the system. There were certainly other words that could have been chosen to implement Selden's system (Baker in fact used some other words), but that did not change the fact that the words actually used by

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<sup>9</sup>(...continued)

Idea-Expression Dichotomy in Copyright Law, 56 Tenn. L. Rev. 321, 326-330 (1989) (four holdings to be drawn from the case); J. Reichman, Computer Programs as Applied Scientific Know-How: Implications of Copyright Protection for Commercialized University Research, 42 Vand. L. Rev. 639, 691-92 (1989). A variety of cases cite Baker for doctrines other than merger. See, e.g., Atari v. Nintendo, 975 F.2d at 839; Gates Rubber Co. v. Bando Chem. Indus., Ltd., 9 F.3d 823, 837 (10th Cir. 1993); Sega, 977 F.2d at 1524; Synercom, 462 F. Supp. at 1011.

<sup>10</sup> Actually, Baker is a precursor to the merger doctrine. See, e.g., Arica Inst., Inc. v. Palmer, 970 F.2d 1067, 1076 (2d Cir. 1992); NEC Corp. v. Intel Corp., 10 U.S.P.Q. 2d 1177, 1179 (N.D. Cal. 1989); Softklone, 659 F. Supp. at 457.

Selden were uncopyrightable.

This in no way implies, as Lotus asserts, that all text in a user interface is uncopyrightable. The Lotus on-screen help text and long prompts, like the text of Selden's book, may qualify for copyright protection. Such text is not used to implement the system.<sup>11</sup> By contrast, the words in Lotus' menus (such as "copy" or "print") are like the labels on switches or knobs. In number, arrangement and function, they are analogous to the switches and attendant labels that are arranged and grouped in the cockpit of a commercial jet aircraft. But it is difficult to imagine a claim of copyright protection over the "selection and arrangement of the executable operations" in a jet cockpit.

The words on Selden's forms and those in Lotus' menus are utilitarian words – they are a necessary part of performing a function. The copyright standard for protecting them is no different than the copyright standard for protecting a portion or "element" of any other functional article. The lower court correctly stated this standard. As Borland explained at pages 46-48 of its opening brief, substituting the word "system" for the word "idea" in the lower court's statement regarding the copyrightability of utilitarian articles, the test for copyrightability would read

If a particular expression of the [system] . . . communicates no details beyond those essential to stating the [system] itself, then that expression would not be copyrightable.

Paperback, 740 F. Supp. at 65. The Lotus menu commands and their order communicate no "details beyond those essential to stating the system itself" and are therefore uncopyrightable.

**B. Neither Selden's Nor Lotus' Words are Copyrightable, Even if Displayed on a Computer.**

Selden's system, including the columns and textual labels, was implemented on paper by hand. Today, Selden would have implemented his system of labels and columns on a computer, rather than on paper. Indeed, Borland has done just that, demonstrating in its Reply Video (App. 1205) functioning spreadsheet

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<sup>11</sup> In Kepner-Tregoe, Inc. v. Leadership Software, Inc., 1994 U.S. App. LEXIS 1525 (5th Cir. Feb. 2, 1994), the court protected explanatory text similar to 1-2-3's help text, not utilitarian words like the menu commands. The court expressly limited its analysis to rejecting the argument that plaintiff was attempting to copyright a law of nature, citing the existence of alternatives. Id. at \*23-24. The existence of alternatives may demonstrate that a work is not a law of nature, but is not probative of whether a work is a system under Baker v. Selden and § 102(b). The court was not required to address these arguments.

software that uses the Selden forms as its "user interface," with Selden's textual labels as the menu commands.<sup>12</sup> The steps in Selden's system, indicated by the labels, are the same as in Selden's time, but the actions and calculations are made by a computer instead of by hand. As the Reply Video demonstrates, the uncopyrightable labels that are part of Selden's system (or Lotus' system) do not become copyrightable just because a computer automates the steps in the system. But the lower court held just the opposite -- that merely by automating the steps of the system with software, the textual labels become "expressive" because they are distinct from the code that automates them. Borland II, 799 F. Supp. at 214-215. But see Taylor Inst., 139 F.2d at 100 ("[T]he chart neither teaches nor explains the use of the art. It is an essential element of the machine; it is the art itself").

Lotus attempts to distinguish Baker v. Selden by asserting that the 1-2-3 menus are "not analogous" to the textual steps on Selden's forms. Lotus Br. at 35. If anything, the Lotus commands more clearly state the functionality of the underlying system than do the labels on the Selden forms. In any event, as the Reply Video (App. 1205) demonstrates, the Selden word choices can be used as commands just as easily as can the steps of the Lotus menu tree. There is little practical difference between the Selden command "Balance Forward" and the Lotus command "Copy," between the Selden command "Adjusted" and the Lotus command "Recalc," or between the Selden command "Additional Disbursements" and the Lotus command "Combine." Indeed, the Reply Video demonstrates that the Selden commands can be organized into a two-line moving cursor, the "look and feel" of which is hardly distinguishable from 1-2-3. And conversely, as the Reply Video demonstrates, each of the commands in the 1-2-3 menu tree can be implemented by hand, with a calculator, or by computer software.

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<sup>12</sup> Borland's Reply Video (App. 1205) was accepted as part of the lower court's record in the summary judgment phase, as expressly indicated in the first footnote of the lower court's Borland I slip opinion, at p. 2(a) (footnote reprinted for this Court's convenience at App. 10). Lotus incorrectly asserts that only a small portion of the Reply Video was admitted into the record of the later Phase II Trial. Lotus Br. at 34, n.88. In fact, the video excerpt offered at that trial was from a different video -- Borland's initial video, not Borland's Reply Video. Borland's Reply Video was part of the summary judgment record, but was not even offered at the two subsequent phases of trial.

C. The Baker Holding Extends to Exact Copies.

Lotus next attempts to distinguish Baker v. Selden by claiming that the defendant in that case, unlike Borland, used words on his form different from those of the plaintiff. Actually, according to the Court of Appeals opinion that was appealed to the Supreme Court, many of Baker's words were "identical" to those of Selden.<sup>13</sup> More importantly, whether Baker's words were identical or different was irrelevant to the analysis, because the case turned on whether the plaintiff's words were copyrightable in the first place -- the same issue presented here. The Baker court held Selden's words uncopyrightable and, hence, "the [Baker] privilege extends to exact copies." B. Kaplan, An Unhurried View of Copyright 63-66 (1967).

That principle has been readily understood and applied by the courts over the last 100 years.<sup>14</sup> It was applied by the Ninth Circuit to hold the menu command hierarchy of a spreadsheet software product uncopyrightable. Ashton-Tate Corp. v. Ross, 916 F.2d 516 (9th Cir. 1990). Lotus attempts to distinguish Ross because Ashton-Tate's counsel argued that his client's menu command hierarchy was really not similar to that of Ross. As in Baker v. Selden, counsel for the accused party in Ross pointed out alleged dissimilarities. But, as in Baker v. Selden, the Ninth Circuit in Ross held that it need not resolve the question of whether the works at issue were similar, because the complaining party's work (in Ross, as here, the menu command hierarchy) was not copyrightable at all, so there would have been no infringement even if similarity were established.

The subsequent Brown Bag decision provides Lotus no solace. Lotus argues, by quoting the portion of the opinion in which the Ninth Circuit affirmed the lower court's finding of no similarity as to copyrightable

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<sup>13</sup> Selden v. Baker, No. 1620 (C.C. S.D. Ohio, January 21, 1875), reprinted in transcript of record at 8, Records and Briefs of the Supreme Court, Baker v. Selden, 101 U.S. 99 (1879).

<sup>14</sup> Sega, 977 F.2d at 1524 ("In some circumstances, even the exact set of commands used by the programmer is deemed functional rather than creative for purposes of copyright"); Crume v. Pacific Mut. Life Ins. Co., 140 F.2d 182, 184 (7th Cir. 1944); Taylor Inst., 139 F.2d at 99-100. The "shorthand cases" also illustrate this proposition. See e.g., Brief English Sys., 48 F.2d at 556; Signo Trading Int'l, Ltd. v. Gordon, 535 F. Supp. 362, 365 (N.D. Ca. 1981) ("Under this principal, for example, an explanation of a system of shorthand is copyrightable, but neither the use of that system nor the shorthand spellings found in that work are copyrightable").

features, that the Ninth Circuit sub rosa overruled Ross and held menus to be copyrightable features. Lotus Br. at 37. This is not true. The Ninth Circuit opinion specifically affirmed the lower court's holding that the menus at issue were "unprotectable under copyright." Brown Bag Software v. Symantec Corp., 960 F.2d 1465, 1472-73 (9th Cir. 1992).

D. The Lower Court Protected Lotus' System.

Finally, quoting the Baker decision directly, Lotus claims that "Selden lost because . . . his 'evidence' was principally directed to the object of showing that Baker uses the same system" rather than the same words. Lotus Br. at 31, citing Baker, 101 U.S. at 101. That insight is all the more applicable to this case. As Borland's Reply Video (App. 1205) demonstrates, the gravamen of Lotus' claim is that Borland uses the same "procedure, process and method of operation," a point Lotus hammers home by repeating it again and again throughout its hour-long video (Dkt. No. 118).

The lower court responded to Lotus' argument by protecting exactly what Lotus sought protection over – the system itself (as an arrangement of operations), not the words alone. Both the lower court and Lotus repeatedly used Microsoft's Excel spreadsheet as an example of a non-infringing product.<sup>15</sup> The lower court was fully cognizant of the fact that the version of Excel "blessed" in the Paperback and Borland opinions displays the Lotus menu command hierarchy as a "help" feature – but the Excel "help" display did not permit execution of the Lotus operations.<sup>16</sup> The Lotus words displayed in Excel could be read and understood by the user to provide an explanation of the Lotus system but could not be used to execute their underlying functions. If, as Lotus now claims, the lower court was protecting the "expressive" character of the Lotus words rather than their underlying functionality, Excel is infringing – there is no clearer example of the Lotus words being used to "express" "help" rather than to execute operations. But the lower court did exactly the opposite. It blessed Microsoft's use of Lotus' words but enjoined Borland's use of Lotus' system.

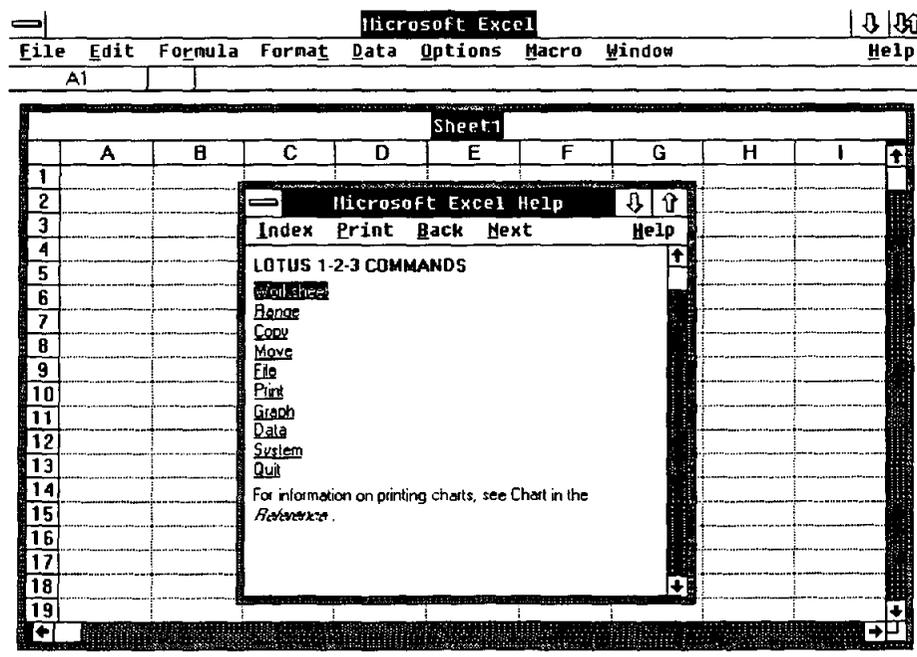
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<sup>15</sup> See Borland I, 788 F. Supp. at 81; Borland III, 831 F. Supp. at 214; Borland IV, 831 F. Supp. at 229, 234; Paperback, 740 F. Supp. at 66, 69; Manzi (Paperback) Tr. at 412-413, App. 876; Lemberg Tr. at 2:58-59 & Ex. 13, App. 855, 857.

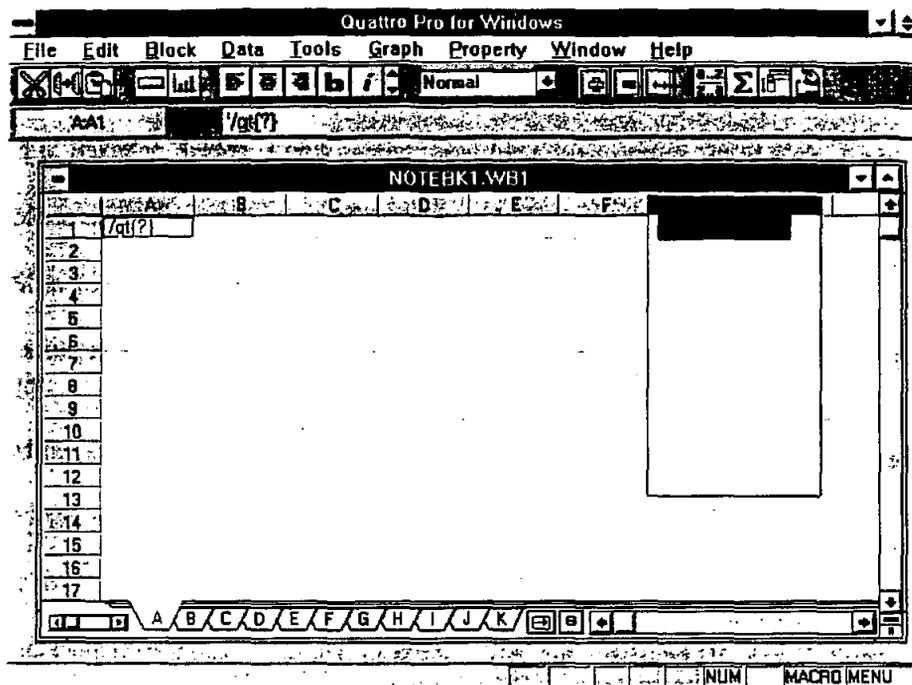
<sup>16</sup> Borland's Memo. in Support of Renewed Motion for Summary Judgment (Dkt. No. 168), at 4-6.

After the Borland II summary judgment decision, Borland removed the Lotus words from its product. Borland thereby lost the ability to provide compatibility to users who write, debug, edit and use each others' macros over a network. Users' Br. at 4-5, 9-10. Borland retained only the ability to execute some Lotus macros through the "Key Reader" feature. The Key Reader retained the functionality of limited macro execution by using letters in a data file to implement the Lotus functionality. The Key Reader did not use the Lotus words at all, either in a data file or on the screen. When the Key Reader is invoked, blank boxes appear where the Lotus menus would have been. See Quattro Pro 4.01 (Software Library, Dkt. No. 360). Yet, Lotus went right on suing and the lower court went right on enjoining.

Turning copyright on its head, the lower court protected functional operations, but permitted display of the words. This is the user interface screen display with the Lotus menus that the lower court said was perfectly legal in Excel:



This is the screen display of the Borland Key Reader (with blank boxes instead of the Lotus menus) that the lower court enjoined:



The lower court gave Lotus patent-like protection over its functionality. This is precisely what Lotus has sought in this case -- the ability to control the "use" of its functionality. For example, Lotus responded to the brief of the User Groups by forcefully asserting that users were never promised that they could "use" their macros with other spreadsheets. Lotus Br. at 59.<sup>17</sup> Lotus "supports" this argument by pointing out that copyright law does not address the "use" of a work. *Id.* at 60. This omission in the copyright law is not accidental. "Use" is covered by the patent law. The patent law, unlike the copyright law, gives the patent owner the right to regulate (and even prevent) "use" of the patented invention.<sup>18</sup> Lotus needs to get a patent if it wishes to control the "use" of its system.

Lotus does not deserve to lose this case because, in its words, "it chose the wrong form of intellectual property protection." Lotus Br. at 59. Lotus deserves to lose because it is trying to secure patent-type protection without satisfying the patent requirements of novelty, examination and contribution to the prior art.

<sup>17</sup> Under the logic of Lotus' argument, Intel gets to decide which computers Lotus 1-2-3 can be "used" on, because 1-2-3 was written in Intel's assembly language. Manzi (Paperback) Tr. at 323, App. 875.

<sup>18</sup> Compare 35 U.S.C. § 271(a) with 17 U.S.C. § 106. See also Aro Mfg. Co. v. Convertible Top Replacement Co., 377 U.S. 476, 484 (1964) ("unauthorized use, without more, constitutes [patent] infringement"); 4 D. Chisum, Patents, § 16.02[4] at 16-24 to 16-30 (1993).

If, like the plaintiff in Baker v. Selden, Lotus cannot meet these requirements, or if it chose not even to try, it should not be able to claim the same scope of protection through copyright law. That, as the Baker court observed, 101 U.S. at 102,

would be a surprise and a fraud upon the public. That is the province of letters-patent, not of copyright.

Professor Arthur Miller said it best: "The creativity, ideas and utilitarian aspects of a copyrighted work must look elsewhere for legal protection."<sup>19</sup>

The lower court opinions left no doubt as to what was being protected – the "selection and arrangement of executable operations" in Lotus' program. See, e.g., Borland IV, 831 F. Supp. at 231. No other conclusion can be fairly drawn from Paperback and the four Borland decisions. Lotus' post hoc attempt to characterize the lower court decisions as protecting words and not functionality is belied by both the logic and results of those decisions. The observation of the Crume court, 140 F.2d at 184, is equally applicable here:

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<sup>19</sup> Second Miller Decl. at ¶ 29. Lotus and IBM have cited certain declarations from the Evergreen case of Professor Melville Nimmer, a member of CONTU who separately concurred in the Final Report, as secondary authority for the intent of that Committee. See Lotus Br. at 30; IBM Br. at 7, 10, 21. Such declarations may be considered as "subsequent legislative history" which is "sometimes considered relevant" of legislative intent. Consumer Products Safety Comm'n v. GTE Sylvania, Inc., 447 U.S. 102, 118 n.13 (1980). As the lower court observed in Paperback, 740 F. Supp. at 50-51, in declarations filed in the same case, the Chairman of the Software Subcommittee of CONTU, Professor Arthur Miller, expressed markedly different views from those of Professor Nimmer. Since Professor Nimmer's declarations were reprinted in an article written by IBM's Senior Corporate Counsel but Professor Miller's were not, copies of Professor Miller's declarations are attached for the Court's convenience. See A. Clapes, et al., Silicon Epics and Binary Bards: Determining the Proper Scope of Copyright Protection for Computer Programs, 34 UCLA L. Rev. 1493 (1987).

The Miller declarations take markedly different positions than those now taken by IBM. For example, the IBM brief states that computer programs should receive the same protection as all other literary works. IBM Br. at 9-10. By contrast, Professor Miller stated that Congress intended to limit copyright protection for computer programs in light of their utilitarian nature. Second Miller Decl. at ¶ 18-19. While the IBM Brief states that the "selection and arrangement of executable operations" are protectable as a compilation, IBM Br. at 20-21, Professor Miller stated that such protection "would amount to the kind of blockage prohibited by 17 U.S.C. § 102(b) and feared by the members of CONTU," First Miller Decl. at ¶ 18-20. Professor Miller also points out why the utilitarian aspects of computer software are best protected by patent law and not copyright. Second Miller Decl. at ¶ 20-31.

[P]laintiff recognizes defendant's right to the use of the plan or method taught by plaintiff, but denies to the defendant the right to use the words necessary to effect such use. It appears to us that the concession is inconsistent with the denial.

E. Lotus Cannot Avoid the Baker Result.

Under Baker v. Selden and its progeny, the Lotus words fall on the patent side of the dividing line between patent and copyright law and, hence, are unprotectable. Lotus advances three arguments to avoid this result.

1. The menus are not a "computer program".

First, Lotus claims that the menu commands themselves should be protected as a "computer program" because they meet the statutory definition of § 101 -- "statements or instructions to be used directly or indirectly in a computer . . . to bring about a certain result" (emphasis supplied). Lotus Br. at 30. But the legislative history demonstrates that the word "indirectly" was added to the statutory definition only to ensure protection for source code, as well as object code:

We insert 'indirectly' because we have in mind that many programs are written in source code, using a high-level language, which code needs to be compiled into the object code which directly causes a computer to achieve a certain result.

National Commission on New Technological Uses of Copyright Works ("CONTU"), Transcript of Sept. 15, 1977 CONTU Meeting at 79 (CBEMA proposal accepted by CONTU).

Moreover, the screen displays, including their menus, are not instructions used in the computer. They are the "output" of the computer program -- the "certain results" from the execution of the "set of statements," as Professors Karjala and Menell explain. Karjala-Menell Br. at 4-5. Professor Goldstein's treatise also addresses Lotus' argument:

Although a screen display may contain instructions to the user, it does not contain a set of instructions to be used in the computer to produce a certain result. Rather, the screen display is itself the result produced by the computer program. Thus, even if the protectable elements of a computer program extend to structure, sequence and organization, these elements differ only in degree from the computer program's literal phrasing. These elements do not include screen displays, which, by contrast, differ in kind from both the program's literal phrasing and its sequence, structure and organization.

1 P. Goldstein, Copyright § 2.16, at 213-14 (1989) (hereinafter "Goldstein Treatise").

No other result, consistent with the legislative history, is possible. During its deliberations, CONTU saw screen display instructions and understood their relationship to computer code,<sup>20</sup> yet did not remotely suggest that such screen displays would be copyrightable as instructions to the computer. On the contrary, all of the CONTU Commissioners agreed that the screen output of the program would be protected if, and only if, judged on its own merits and apart from the underlying program, it satisfies the usual requirements for copyright protection.<sup>21</sup>

2. The menus alone are not copyrightable.

Lotus next argues that the menu command hierarchy, alone and without regard to the underlying program, satisfies the definition of "literary work" under § 101. Manifestly, the menu commands are "words" and "verbal symbols" under § 101, but they do not meet the requirements for copyrightability set forth in § 102.

Prior to the 1976 amendments to the Copyright Act, the statute protected "all the writings of an author." Perhaps under this language, the words of the menu command hierarchy might qualify for protection. In 1976, Congress chose to replace the phrase "all the writings of an author" with the term "works of authorship" to make clear that all "writings" are not copyrightable. See *Borland Br.* at 34-36, and citations therein. Congress also enacted § 102(b) to embody the principles of *Baker v. Selden*.<sup>22</sup> The courts have never had difficulty with the concept that, following *Baker v. Selden*, utilitarian text is uncopyrightable. The textual labels on Selden's forms were not copyrightable. The "clauses" and "paragraphs" of plaintiff's insurance pamphlets were held uncopyrightable in *Crume*.<sup>23</sup> The menu command hierarchy of Ross's

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<sup>20</sup> See, e.g., Transcript of Feb. 16-17, 1978 CONTU Meeting at 17, 19-21; Nov. 17-18, 1977 Meeting at 8; Nov. 18-19, 1976 Meeting at 122-23.

<sup>21</sup> Transcript of May 5, 1977 CONTU Meeting at 34, 42-43 (Commissioner Miller); at 41 (Commissioner Nimmer stating, "I agree that there can be copyright protection for the . . . instructions in many circumstances, quite apart from the copyright for the final product. They are separable. Agreed."); April 20-21, 1978 Meeting at 120-21 (Commissioner Lacy); see *Borland S. J. Br.* (Dkt. No. 141) at 95-98.

<sup>22</sup> See H.R. Rep. No. 1476, 94th Cong., 2d Sess. (1976), reprinted in 1976 U.S.C.C.A.N. 5659; see also CONTU Final Report at 19.

<sup>23</sup> *Crume*, 140 F.2d at 183-184.

spreadsheet was held uncopyrightable in Ashton-Tate v. Ross.<sup>24</sup> The menu commands of Lotus' screen display, under Baker v. Selden and its progeny, are similarly unprotectable.

Copyright protects "expression," not mere words. Under established copyright doctrine, "[c]ourts withhold protection from, and the Copyright Office regulations prohibit the registration of, words and short phrases." 1 Goldstein Treatise at § 2.7.3.<sup>25</sup> The Copyright Office will not register claims in "words and short phrases" generally, 37 C.F.R. § 202.1 (1993), nor will it register claims in

menu screens and similar functional interfaces consisting of words or brief phrases in a particular format.

Ex. 19 (letter from Copyright Office to applicants), App. 1162. The Office has specifically instructed applicants that they are not to refer to "menu screens" as copyrightable authorship in applications for the registration of computer programs, or the applications will be rejected. Ex. 20 (Copyright Office publication "Computer Programs and Related Screen Displays") at 3, App. 1166. The Office has given the same instructions to its examiners -- to reject applications seeking to claim copyright authorship in "menu listings." Copyright Office Screen Display Practices, Copyright Office Br., Appendix VIII, at 6, 12, App. 1017.

The developers of 1-2-3 testified that "every command was chosen because it suggested to some measure what the command did." Sachs Tr. at 154, App. 920. Words were chosen to "intelligently convey to the user the purpose of each command and its underlying functionality." Kapor Aff. at ¶ 75, App. 546. The menu commands, standing alone, simply fail to meet the § 102 requirement of an "original work of authorship," a point conceded by Lotus' counsel when he argued in Paperback that the lower court should not

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<sup>24</sup> Ross, 916 F.2d at 521-522.

<sup>25</sup> For example, in Magic Mktg., Inc. v. Mailing Servs. of Pittsburgh, 634 F. Supp. 769, 772 (W.D. Pa. 1986), the court held uncopyrightable the plaintiff's collection of phrases for use on envelopes -- phrases such as "Telegram," "Gift Check" and "Priority Message" because they were "stereotyped" communications of the underlying idea. The court specifically denied protection to the phrase "CONTENTS REQUIRE IMMEDIATE ATTENTION" because it was "nothing more than a direction or instruction for use." Id. See also, e.g., Arica, 761 F. Supp. at 1063 (denying protection for "fragmentary words and phrases" used as part of system), aff'd, 970 F.2d at 1072; New Haven Copper Co. v. Eveready Mach. Co., Inc., 229 U.S.P.Q. 838, 841 (D. Conn. 1986) (denying protection to "column headings on plaintiff's table").

base its analysis on the menus alone:

I mean that the reason we're doing this business about the classifications and we're trying to argue so hard that this is a single work is because we don't want the menus to have to be judged standing alone, that there isn't enough subject matter, there isn't enough writing there, there isn't enough words for that to be copyrightable subject matter.

Paperback Trial Tr. Vol. XII at 73, App. 3. The menu commands are not copyrightable "expression." Rather, they are words attendant to a system and therefore uncopyrightable under the Baker line of authority.<sup>26</sup>

3. The "Literary Works" classification does not imply any particular scope of protection.

Finally, and principally, Lotus contends that because Congress chose to classify computer programs as "literary works," all non-literal elements of programs should be protectable. Lotus Br. at 30. The code of a computer program (i.e., the "set of instructions") is most assuredly a "literary work." But it is hornbook law that the § 102 classification of a work (as, for example, a "literary work" or an "audiovisual work") in no way implies any particular scope of protection, a point Lotus openly concedes in its brief.<sup>27</sup> Professor Miller explains this point most clearly in his first declaration (at ¶ 17): "Stated simply, the different types of literary works, including novels, plays and directories, do not have the same scope of protection." Different types of literary works enjoy differing scopes of protection. Fictional literary works command broad protection, while factual literary works receive a far more circumscribed scope of protection.<sup>28</sup>

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<sup>26</sup> The suggestion of Lotus' amici that the menu commands as the selection and arrangement of executable operations "should be protected as a compilation," is addressed at pp. 41-42 of Borland's opening brief. Section 103 is subordinate to § 102. See Softklone, 659 F. Supp. at 462-463.

<sup>27</sup> The statutory types of works "do not and are not intended to provide a measure by which one can define the limits of protection afforded to a particular type of work." Lotus Br. at 30.

<sup>28</sup> See, e.g., Stewart v. Abend, 495 U.S. 207, 237 (1990); Rogers v. Koons, 960 F.2d 301, 310 (2d Cir. 1992); Lewis Galoob Toys, 964 F.2d at 972; Sega, 977 F.2d at 1524; 3 M. Nimmer, et al., Nimmer on Copyright § 13.05[A] at 13-170, 171 (1993) ("[C]opyright protection is narrower . . . in the case of factual works than in the case of works of fiction or fantasy").

A computer program is neither a fictional nor factual literary work. It is a utilitarian literary work, as the lower court, the Altai court, the Ninth Circuit, the Tenth Circuit and Professor Miller all explain.<sup>29</sup> The scope of protection for a computer program is the same as that for other utilitarian works. In short, not all "elements" of a utilitarian work qualify for copyright protection. The statute and case law both state that an element of a utilitarian work may be protectable by copyright only to the extent that it is aesthetic and separately identifiable from the utilitarian aspects of the work.<sup>30</sup> Baker v. Selden and its progeny apply that same test whether the utilitarian system is embodied in words or some other more tangible medium. "[T]he principle is the same in all." 101 U.S. at 105. Under the test correctly set forth by the lower court for the copyrightability of an element of a utilitarian article, see Paperback, 740 F. Supp. at 65, the Lotus menus communicate no "details" beyond those essential to "stating the [system] itself" and, hence, are uncopyrightable, whether viewed as a non-literal "element" of the code or as freestanding words.

There are, to be sure, a number of cases that suggest in loose language, without analysis of any kind, that non-literal aspects of computer programs are copyrightable. But only Altai and the cases that follow it have actually analyzed the extent to which non-literal elements are protectable.<sup>31</sup> The few district courts that have protected the menu aspects of screen displays have generally focused on artistic and stylistic aspects of display, rather than the words themselves.<sup>32</sup> No court of appeals has even gone this far. The Ninth Circuit

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<sup>29</sup> Paperback, 740 F. Supp. at 58 (some literary works are utilitarian); Altai, 982 F.2d at 704 (computer programs have "essentially utilitarian nature"); Second Miller Decl. at ¶ 18 (computer programs are utilitarian works, not artistic works). The authority in the Ninth and Tenth Circuits is to the same effect. See, e.g., Gates Rubber, 9 F.3d at 823; Sega, 977 F.2d at 1524 ("computer programs are, in essence, utilitarian articles -- articles that accomplish tasks").

<sup>30</sup> Paperback, 740 F. Supp. at 54 (citing 17 U.S.C. § 101); see also Borland II, 799 F. Supp. at 210 (citing Brandir Int'l, Inc. v. Cascade Pac. Lumber Co., 834 F.2d 1142 (2d Cir. 1987)).

<sup>31</sup> The court in Kepner-Tregoe protected literal text, but "[did] not purport to define the precise scope of copyright protection for non-literal elements of copyrighted works." 1994 U.S. App. LEXIS 1525 at \*21 n.20.

<sup>32</sup> For example, in Softklone, 659 F. Supp. at 460, the district court protected the "highlighting" and "capitalizing" of certain menus only because they "have no relationship to the functioning . . . of the computer program." Similarly, Manufacturers Technologies, Inc. v. CAMS, Inc., 706 F. Supp. 984, 995-998 (D. Conn. 1989), provided protection to only the three screens that were not limited by functionality and denied copyright protection to the words and format of most menus.

held in Ross that a spreadsheet menu hierarchy is uncopyrightable. 916 F.2d at 521. The Tenth Circuit recently vacated a lower court's holding that menus are copyrightable and directed the lower court to apply the "process-expression dichotomy" and the "idea-expression dichotomy," as well as merger, to claims of copyright in menus, as part of the filtering analysis mandated by Altai. Gates Rubber, 9 F.3d at 843-846. This is precisely Borland's point. The protection of non-literal elements of code structure cannot logically extend to what § 102(b) says is uncopyrightable, and, hence, the "selection and arrangement of executable operations" in the form of a menu tree is uncopyrightable.

F. The Lower Court's Analysis is Inconsistent with *Altai*.

Fully half of the copyrightability section of the Lotus brief is devoted to arguing that the lower court's test is consistent with that of Altai. Both tests have three levels of analysis, and both tests invoke Judge Hand's abstractions approach, but that is the extent of the similarity. The Law Professors' Brief at pp. 33-42 anticipates Lotus' argument, identifying the inconsistencies between the Altai approach and that of the lower court at every level of analysis. Most fundamentally, the lower court's test is skewed too heavily in favor of the rights of authors. The test recognizes that "merger" limits copyright protection, but it recognizes none of the other limitations that exist for the benefit of society generally, and users and competitors in particular. Under the lower court's test, all words "not essential to every statement of the system" are unprotected. Of course, words "essential to every statement of the system" are "merged." But under the lower court's test, all other (i.e., non-merged) words are copyrightable. Baker v. Selden and its progeny teach that words attendant to the system are unprotected. The words Selden chose to invoke his system were unprotectable, whether "essential to every statement of the system" (i.e., whether "merged") or not.

In any event, Lotus correctly argues (Lotus Br. at 37-38) that it is the result of the lower court's methodology, rather than the methodology itself, that bears the greater scrutiny on appeal. That the lower court's methodology produces results inconsistent with the copyright law is readily demonstrable. Both the Law Professors' Brief (at 15-18) and the separate Karjala-Menell Brief (at 17) demonstrate that, under the lower court's test, Selden, rather than Baker, would have prevailed. Similarly, in briefing below, Borland

demonstrated that the losing party in Feist would have won under the lower court's approach.<sup>33</sup> These aberrant results occur because the lower court acknowledges only merger, and merger alone, as a limitation on the scope of copyright protection. The lower court's analysis does not consider the other doctrines emanating from Baker v. Selden.

More important is the fact that the lower court's analysis starts where Altai ends. Altai applies the abstractions test to literal code (which is clearly copyrightable) in order to identify similar non-literal elements at higher levels of abstraction. The lower court's test starts with the non-literal elements themselves and attempts to "abstract" them even further to determine their copyrightability.

Lotus argues that the lower court would have reached the same result under Altai. Lotus claims that the lower court would begin its application of Altai by

employing an "abstraction" analysis to define the primary "idea" behind the Lotus 1-2-3 menus.

Lotus Br. at 47. This is what the lower court actually did in this case. It is completely and fundamentally incorrect. The Altai test begins by applying the abstractions analysis to the code. The Altai court specifically noted that its analysis applied only to "the program itself," and was not "concerned with a program's display." Altai, 982 F.2d at 703.

1. Non-literal elements of the code

After identifying the program's various levels of abstraction, the Altai court would, even without "filtering" anything from the analysis, find absolutely no similarity between the Lotus code and code structure and that of Borland -- at any level of abstraction, except at the very highest level -- the "selection and arrangement of executable operations." Like the "fundamental tasks" in the Gates Rubber analysis, the "selection and arrangement of executable operations" are "the ideas or purposes underlying a computer program," and hence are uncopyrightable. See Gates Rubber, 9 F.3d at 845.

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<sup>33</sup> See Borland's Response to Plaintiff's Renewed Motion for Summary Judgment (Dkt. No. 183) at 27-28.

2. Literal words in the screen display

Copyright protection of the computer program does not automatically extend to the screen displays produced by the program. As the amicus brief of Professors Karjala and Menell explains, the screen display is not the "set of instructions." It is, rather, the "certain result" brought about by the instructions. Karjala-Menell Br. at 4-6. The Altai court made the same point, recognizing that screen displays "represent products of computer programs, rather than the programs themselves." Altai, 982 F.2d at 703. The lower court recognized this fact as well. Borland II, 799 F. Supp. at 209 (screen displays are output of program).

Therefore, CONTU concluded that the screen display of a computer program must be independently evaluated for copyrightability. All of the Commissioners agreed that the output of the program (the "certain results") would be protected if, and only if, judged on its own merits and apart from the computer program, it satisfies the usual requirements for copyright protection. See Borland S.J. Br. (Dkt. No. 141) at 95-98.

The Altai court made the same point, recognizing that "certain types of screen displays" can be separately protected by copyright -- "[i]f . . . copyrighted separately as an audiovisual work." Altai, 982 F.2d at 703. Under Altai, elements of such a screen display must be judged for copyrightability independent and apart from the underlying program -- and the extent of protection for such elements is limited to the extent "their expression is protectable." Id. The Copyright Office Brief (Dkt. No. 85, at p. 5) filed in the lower court makes precisely the same point.

Turning to the Lotus screen displays, the Altai court would observe that Lotus specifically sought from the Copyright Office and was specifically refused audiovisual registration on its screen displays for lack of audiovisual subject matter. Ex. 6 (letter from Copyright Office to Kerry Konrad), App. 1146. Furthermore, the only actionable similarity alleged in this case is that of the menu command hierarchy, not the audiovisual aspects, if any, of the screen display. Under Altai, even if, contrary to fact, the Lotus screen display was a copyrightable audiovisual work, its elements enjoy protection only to the extent that "their expression is protectable." Altai, 982 F.2d at 703. Under the words and phrases doctrine, the analysis of Baker v. Selden and the test for utilitarian works, the Lotus menu commands are uncopyrightable. Unlike the on-line help text

and long prompts, and unlike more fanciful screen displays (such as videogames), the Lotus menu words "communicate no details beyond those essential to stating the [system] itself." Paperback, 740 F. Supp. at 65.

G. Compatibility is Not Limited to Pre-Existing Works.

Although not strictly necessary to a determination of this case, the issue of "compatibility" has received considerable attention in Lotus' brief and the briefs of several of Borland's amici. Lotus relies on the dicta of a Third Circuit decision for the proposition that "compatibility" is a "commercial and competitive objective which does not enter into the somewhat metaphysical issue of whether particular ideas and expressions have merged." Apple Computer, Inc. v. Franklin Computer Corp., 714 F.2d 1240, 1253 (3d Cir. 1983).

This case is very different from Franklin. This case turns on the dividing line between patent law and copyright law under Baker v. Selden, not on the issue of "merger." More importantly, in Franklin, the defendant was asserting the right to achieve compatibility by copying code -- literal expression that is clearly copyrightable. Here, by contrast, the Lotus words, like those of Selden, are uncopyrightable, and Borland can use them to achieve compatibility.

But even assuming, contrary to the Baker v. Selden analysis, that Lotus' words were copyrightable expression, Borland would still be entitled to use them to achieve compatibility. As a recent commentator observed, the Franklin dicta "misapprehended the purpose and limitations of copyright altogether."<sup>34</sup> The other Courts of Appeal have not followed the Franklin dicta. Rather, the Courts of Appeal have accepted the filtration analysis set forth in the Altai decision. Under the Altai filtration analysis, even a portion of code can be uncopyrightable if it is "strictly necessary to achieve compatibility." Atari Games Corp. v. Nintendo of America, Inc., 1993 WL 214886, \*23 n.14 (N.D. Cal. Apr. 15, 1993).

Lotus concedes that, under Altai, "filtration" of elements necessary for compatibility is appropriate. Lotus Br. at 44. But Lotus argues that, in applying filtration, the Court should look to the infringed work (a point with which Borland agrees) and filter out only those elements required for compatibility between the

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<sup>34</sup> T. Teter, Note, Merger and the Machines: An Analysis of the Pro-Compatibility Trend in Computer Software Copyright Cases, 45 Stan. L. Rev. 1061, 1081 (1993).

infringed work and other programs already in existence at the time the first version of the infringed work was created. Id. at 44-46. In this case, Borland was attempting to achieve compatibility with respect to 1-2-3 version 2.01, not the original version 1.0. The menus of 1-2-3 version 2.01 were themselves heavily constrained by the need to be compatible with third party application macros written for earlier versions of 1-2-3. Manzi Tr. at 173-176, App. 885. Given the fact that most computer programs go through several releases, Lotus' interpretation of Altai does not filter out enough. Elements necessary to achieve compatibility with works created after the initial version of the infringed work must also be filtered out.

While internally consistent, Lotus' argument is inconsistent with the facts of Altai, the scenes a faire doctrine upon which filtration was based, and the fundamental principle set forth in Altai that copyright was not intended to let "first-comers" "lock up" basic technology and markets. See Borland Br. at 53-54; ACIS Br. at 10-14. Lotus cannot put user application macros created after the first version of 1-2-3 off limits to competition merely by asserting copyright protection. As Chief Judge Breyer has observed, copyright is a "tax on readers [in this case, "users"] for the purpose of giving a bounty to authors."<sup>35</sup> Hence, the "bounty" is not based upon how valuable the work has become to others -- measured, in this case, by the number of user macros written in the 1-2-3 macro language -- but rather is limited to no more than that necessary to provide an incentive to produce the work in the first place. The lower court rejected this approach. It conducted a trial on the issue of constraints at the time the first version of the plaintiff's work was originally created, Borland III, 831 F. Supp. at 207, but refused to consider the extent to which elements in the plaintiff's work had themselves become constrained by the necessity for compatibility with user macros created after the initial release of 1-2-3. See Borland II, 799 F. Supp. at 214.

Under a proper filtration analysis, the plaintiff's work should be filtered for elements necessary to achieve compatibility with other programs in existence at the time the defendant's work is created, not merely those created prior to the initial release of plaintiff's work. Under such an analysis, the plaintiff's scope of

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<sup>35</sup> Proceedings of the Congressional Copyright and Technology Symposium, 99th Cong., 1st Sess., 99 (1985) (statement of Stephen Breyer, J.).

protection is determined by the "use" of plaintiff's elements in third party applications, not by the use of plaintiff's elements in defendant's work, as Lotus suggests critically. Lotus Br. at 49. This constraint was foreseen and accepted by 1-2-3's original developers, because they included the macro facility in the product originally, and encouraged users to write application macros. Raburn Decl. at ¶ 18 and Ex. B, RE 2, 7.

The admonition to limit the size of the "bounty" is all the more applicable to utilitarian works like computer programs, which implicate the dividing line between patent and copyright. The lower court's approach protects elements of the original work that have become purely functional in third party applications (i.e., necessary for compatibility) because they were arguably "expressive" in the first version of plaintiff's work. The effect of the lower court's refusal to filter elements necessary to achieve compatibility with user macros is to provide Lotus with a patent-type monopoly over the "use" of its system, as Lotus' response to the brief of the User Groups demonstrates. See supra, pp. 11-12. Patent protection provides the scope of protection Lotus is seeking, but only as the quid pro quo for the inventor's contribution to the prior art. Copyright requires no such quid pro quo and therefore provides no monopoly over later "use." Lotus needs to get a patent if it wishes to control the "use" of its system.

## II. BORLAND SHOULD PREVAIL ON ITS AFFIRMATIVE DEFENSES.

Borland's use of the Lotus menus also qualifies as a fair use under 17 U.S.C. § 107. Under the facts of this case, the most important fair use factors are the second (the nature of the copyrighted work) and the third (the amount of the copyrighted work used). Lotus pays short shrift to these factors. The fact that the menus are utilitarian and their copyrightability is therefore highly debatable (at best) means that the second factor weighs heavily, if not conclusively, in Borland's favor. See Sega, 977 F.2d at 1524. Also, since Borland used none of the Lotus 1-2-3 code, and the lower court found that the visual displays were dissimilar to those of 1-2-3, the third factor must also weigh heavily in favor of Borland. These factors alone compel a finding of fair use.

Lotus' response to Borland's other defenses simply ignores the fact that Lotus' counsel, during the

Paperback trial, waived claims against the menu command hierarchy, standing alone and apart from the rest of the user interface. As Lotus' counsel put it in open court, "there isn't enough subject matter, there isn't enough writing there, there isn't enough words for that to be copyrightable subject matter." Paperback Trial Tr. Vol. XII at 73, App. 3. Lotus in this case asserts the very claim its counsel waived in Paperback; the only similarity at issue in this case is that of the menu command hierarchies.

Even apart from counsel's waiver, the doctrine of laches would limit damages to, at most, a three month time period. As Judge Hand observed in Haas, it is "inequitable for the owner of a copyright, with full notice of an intended infringement, to stand inactive while the proposed infringer spends large sums of money in its exploitation, and to intervene only when his speculation has proved a success." Haas v. Leo Feist, 234 F. 105, 108 (D. N.Y. 1916). The conduct condemned by Judge Hand is precisely that of Lotus. Not only did Lotus fail to give notice of its position to Borland, its management affirmatively concealed its belief that Borland's products were infringing. See Borland Br. at 16-17. Indeed, Lotus did not articulate its legal theory (against the menu command hierarchy standing alone) until ordered to do so by the Borland I decision, in March of 1992, almost two years after this case was filed. See Borland I, 788 F. Supp. at 98; Borland II, 799 F. Supp. at 205. Lotus finally gave Borland and the lower court notice of its claims in its "Renewed Motion for Summary Judgment" filed April 24, 1992. The lower court ruled in Lotus' favor on these claims in July of 1992, see Borland II, 799 F. Supp. 203, and Borland removed the Lotus menus on the next business day.

In defense of its inequitable conduct, Lotus argues that it merely sought to avoid "needless duplicative litigation" and therefore waited until after the Paperback decision before bringing suit against Borland. Lotus Br. at 55. This argument misses the point. Lotus could have easily satisfied Judge Hand's requirement and provided notice without filing suit. Lotus was required only to inform Borland of Lotus' true intentions, not to sue Borland. With proper notice, Borland could have changed its product, negotiated a resolution, or filed a declaratory judgment action itself.

The facts with respect to the Key Reader are similar. Lotus plainly and unambiguously waived any claim against "the ability to execute 'macros' originally written using Lotus 1-2-3 by means of a conversion

or translation program, standing alone." Lotus Response to Request for Admission No. 9, App. 997. Whether Lotus knew of the particular Key Reader feature at the time it made its waiver is simply irrelevant. The waiver was directed to the "ability" to execute macros, not to a particular feature in a particular product. And Lotus never made any attempt to amend or modify its Admission even after it had clear knowledge of the particular Key Reader feature. Moreover, even after Lotus admittedly knew of the particular Key Reader feature, it delayed asserting a claim in the pending litigation for almost seventeen months, an intentional delay calculated to inflict the maximum damage on Borland.

### CONCLUSION

Lotus concedes that Borland copied none of Lotus' computer code -- Borland wrote all of its code from scratch. Lotus concedes the absence in similarity of visual displays. Lotus' entire case is based on Borland's "copying" of the Lotus menu command hierarchy, an arrangement of utilitarian computer operations and functions.

But "[n]ot all copying, however, is copyright infringement." Feist Publications v. Rural Tel. Serv. Co., Inc., 499 U.S. 340, 361 (1991). As Chief Judge Breyer observed in his Symposium presentation, "[i]t's of enormous social benefit to allow people to copy." Just as Feist lawfully copied 1,309 of Rural's textual subscriber listings, id. at 344, 361, Borland lawfully copied the unprotectable menus of Lotus 1-2-3. This Court should therefore reverse the lower court's award of summary judgment to Lotus, vacate the lower court's injunction, and reverse the lower court's denial of summary judgment to Borland.

Dated: February 14, 1994

Respectfully submitted,

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By: 

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BORLAND INTERNATIONAL, INC.

Certificate of Service

I hereby certify that a true copy of the foregoing was served on counsel of record for Plaintiff/Appellee herein by overnight courier, on \_\_\_\_\_, 199\_.

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