

NEW YORK TIMES CO. V. TASINI

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During the 1980s and 1990s, the advance and widespread availability of information technology enabled many novel forms of communication and commerce.¹ As a result, a new market developed for the electronic distribution of articles previously published only in paper issues of magazines and newspapers.² Publishers rushed to take advantage of this market, partnering with database providers to generate vast, comprehensive electronic article databases.³ The databases became indispensable research resources for a wide range of scholarly disciplines.⁴ Soon, freelance authors who had authored many of the articles sought a share of the proceeds from the new revenue source.⁵ However, publishers argued that they were merely distributing their magazines and newspapers in a new medium, and therefore owed the authors nothing.⁶

The Supreme Court's decision in *New York Times Co. v. Tasini*⁷ determines the rights of collective works publishers and freelance authors in electronic databases. This Note contends that there remains room within the Court's strict interpretation of the Copyright Act for some limited types of electronic distribution of collective works without prior permission from authors. It also describes the proper analytical framework based on the Court's decision and offers examples of compliant databases. In addition, even if the electronic distribution of collective works is not fea-

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1. See generally NICHOLAS NEGROPONTE, BEING DIGITAL (1995) (recounting the history of media technologies).

2. See, e.g., *About LexisNexis: Premium, Branded Information Products and Portals*, at <http://www.lexisnexis.com/about/default.shtml> (last visited Feb. 10, 2002) (describing the launch of the Nexis service in 1979 to provide news and business information).

3. See, e.g., *id.* (LexisNexis "provid[es] access to thousands of worldwide newspapers, magazines, trade journals, [and] industry newsletters. . .").

4. See Brief of Amici Curiae Ken Burns et al. at 5, *N.Y. Times Co. v. Tasini*, 121 S. Ct. 2381 (2001) (No. 00-201), available at <http://www.nwu.org/tvt/sc-burns.pdf> (last visited Feb. 10, 2002) ("For historians, researchers, scholars and students in countless disciplines, the comprehensive, searchable, full-text journal, periodical and newspaper database has become an irreplaceable and priceless resource.").

5. See Deirdre Carmody, *Writers Fight for Electronic Rights*, N.Y. TIMES, Nov. 7, 1994, at B20.

6. See *id.*

7. 121 S. Ct. 2381 (2001).

sible, this Note argues that the consequences for historical database completeness and usefulness are not dire, and may be mitigated by retaining full-text search capabilities for the affected articles.

I. BACKGROUND

American copyright law seeks to promote the creation of original works by granting authors certain exclusive rights.⁸ While these exclusive rights may lead to financial gains for authors, the fundamental purpose of copyright law is not protecting these gains, but rather promoting broad public availability of creative works.⁹ Reflecting the balance between its means and purpose, copyright law fosters availability by rewarding creative efforts with strong rights which enable authors to control their works only for limited times.¹⁰

Another sort of balancing occurs in the case of collective works, such as magazines and newspapers. In these works, there are a number of competing copyright interests which must be distinguished and reconciled. Collective works are assemblies of numerous individual works.¹¹ These individual works are each subject to copyright.¹² The unique selection and arrangement of the underlying works makes the collective work itself copyrightable, but the copyright in the collective work extends only to the material and creative elements contributed by the publisher, and is separate and distinct from any copyrights in the underlying works.¹³

The employment relationship between a publisher and an author determines the default distribution of copyright interests between them. If an employee of a collective works publisher produces an individual work, the publisher is considered the author of the individual work for copyright

8. U.S. CONST. art. I, § 8, cl. 8 (granting Congress the power “[t]o promote the Progress of . . . useful Arts, by securing for limited Times to Authors . . . the exclusive Right to their . . . Writings . . .”); 17 U.S.C. § 106 (1994) (granting copyright owners exclusive rights to copying, preparation of derivative works, distribution, and public performance or display).

9. *See, e.g., Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 156 (1975) (“Creative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts.”).

10. *See, e.g., id.*

11. 17 U.S.C. § 101 (1994) (defining “collective work” and the related term “compilation”).

12. *Id.* § 102(a).

13. *Id.* § 103(a)-(b).

purposes.¹⁴ In contrast, if the publisher contracts with a freelance author for the production of a work, the freelance author retains the copyright in the individual work.¹⁵ The parties may modify the default distribution of rights by contract, but only if they adhere to strict statutory requirements for a signed transfer of the copyright or a written agreement that the work is for hire.¹⁶

Section 201(c) of the Copyright Act codifies the various rights in collective works:

Copyright in each separate contribution to a collective work is distinct from copyright in the collective work as a whole, and vests initially in the author of the contribution. In the absence of an express transfer of the copyright or of any rights under it, the owner of copyright in the collective work is presumed to have acquired only the privilege of reproducing and distributing the contribution as part of that particular collective work, any revision of that collective work, and any later collective work of the same series.¹⁷

Thus, section 201(c) stresses the rights of authors, while also providing an exclusive list of three limited privileges under which publishers may reproduce and distribute individual works as parts of the collective work and other closely related collective works.

II. CASE SUMMARY

A. Factual Background

Jonathan Tasini and five other authors published articles in *The New York Times*, *Newsday*, and *Sports Illustrated* between 1990 and 1993.¹⁸ The authors worked as freelancers, or independent contractors, per oral agreements with the publishers of these periodicals.¹⁹ In no instance did

14. *Id.* § 101 (defining “work made for hire”); *id.* § 201(b) (providing that employer is considered author of the work in the case of a work for hire).

15. *Id.* § 201(a) (“Copyright in a work . . . vests initially in the author or authors of the work.”).

16. *Id.* § 204(a) (“A transfer of copyright ownership, other than by operation of law, is not valid unless . . . [it] is in writing and signed by the author. . . .”); *id.* § 101 (“A ‘work made for hire’ is . . . a work specially ordered or commissioned for use as a contribution to a collective work . . . if the parties expressly agree in a written instrument signed by them that the work shall be considered a work made for hire.”).

17. *Id.* § 201(c).

18. *N.Y. Times Co. v. Tasini*, 121 S. Ct. 2381, 2385 (2001).

19. *Id.*

any of the contracts include terms regarding placement of articles in electronic databases.²⁰

At the time of publication, the publishers had licensing agreements with LEXIS/NEXIS, a database owner and provider.²¹ Pursuant to these agreements, the publishers regularly provided LEXIS/NEXIS with all of the published articles in a computerized text-only format²² for inclusion in LEXIS/NEXIS databases.²³ The articles contained codes or tags to ease computerized indexing; these tags included the print publication's name, publication date, section, initial page number, headline or title, and author name.²⁴ Database users could search the text of the article or any of these tags, and retrieve articles which matched the search terms.²⁵ No other information that accompanied the articles in the original collective work, such as pictures, advertisements, headline size, or page placement, was transmitted to LEXIS/NEXIS.²⁶ Consequently, such information was unavailable to the user upon article retrieval from the database.²⁷

The New York Times also had licensing agreements with University Microfilms International for the inclusion of Times articles in two CD-ROM products, the New York Times OnDisc ("NYTO") and General Periodicals OnDisc ("GPO").²⁸ The NYTO contained the full texts of Times articles.²⁹ LEXIS/NEXIS provided the computer text files to University Microfilms, so the NYTO and LEXIS/NEXIS articles were identically formatted.³⁰ GPO differed from the other database products by providing image facsimiles of the pages where articles originally appeared, rather than computer text only.³¹ Users could search and retrieve articles from both the NYTO and GPO in a similar manner to LEXIS/NEXIS.³²

20. *Id.*

21. *Id.*

22. The format used was American Standard Code for Information Interchange ("ASCII"), which assigns a unique numerical code for each alphanumeric character and other common characters such as punctuation. *See id.* at 2397 n.7 (Stevens, J., dissenting).

23. *Id.* at 2385.

24. *Id.*

25. *Id.*

26. *Id.*

27. *Id.*

28. *Id.* at 2385-86.

29. *Id.* at 2386.

30. *Id.*

31. *Id.*

32. *Id.*

B. District Court and Second Circuit Decisions

The authors sued the publishers and database providers, alleging copyright infringement when their articles were placed in the electronic databases.³³ The publishers and database providers responded by arguing that the revision privilege for collective works under the Copyright Act permitted reproduction of the articles in electronic databases.³⁴ Both sides moved for summary judgment.³⁵

The District Court for the Southern District of New York granted summary judgment for the publishers and database providers.³⁶ The court first determined that a privilege conferred by section 201(c) was transferable from the publishers to the database providers.³⁷ Then, the court determined that the articles in the databases qualified as “revisions” under section 201(c) because they preserved significant aspects of the original collective work.³⁸

The authors appealed, and the Court of Appeals for the Second Circuit reversed and remanded with instructions to enter summary judgment for the authors.³⁹ The Second Circuit noted that section 201(c) does not permit the publisher to sell individual articles even if all other articles from a particular collective work are also offered for sale.⁴⁰ The court reasoned that section 201(c) does not allow the publisher to circumvent this restriction by selling individual articles using an electronic database which happens to also contain the other articles from the original collective work.⁴¹ Hence, the databases could not be considered revisions of the original periodicals.⁴² Since the court concluded that the databases were not revisions of the original collective works, it declined to decide the question of whether a section 201(c) revision privilege was transferable.⁴³ The publishers and database owners appealed, and the United States Supreme Court granted certiorari.⁴⁴

33. *Tasini v. N.Y. Times Co.*, 972 F. Supp. 804, 806 (S.D.N.Y. 1997).

34. *See id.*; *see also* 17 U.S.C. § 201(c) (1994).

35. *Tasini*, 972 F. Supp. at 806.

36. *Id.*

37. *Id.* at 816.

38. *Id.* at 821.

39. *Tasini v. N.Y. Times Co.*, 206 F.3d 161, 166 (2d Cir. 2000).

40. *Id.* at 168.

41. *Id.*

42. *Id.* at 167-70.

43. *Id.* at 165 & n.2.

44. 531 U.S. 978 (2000).

C. The Supreme Court Decision

1. *The Majority*

In a seven-to-two decision, the Supreme Court agreed with the Second Circuit that the section 201(c) revision privilege did not cover the databases and affirmed summary judgment for the authors.⁴⁵ Writing for the majority, Justice Ginsburg began the analysis by noting that the Copyright Act was amended in 1976 specifically to reduce the superior bargaining power of publishers over authors.⁴⁶ Prior to the 1976 amendment, a freelance author's copyright in an article published in a collective work was recognized only when printed with a copyright notice in the author's name.⁴⁷ Publishers could exert their power by omitting such notices, thereby jeopardizing the author's copyright in the article.⁴⁸ The 1976 amendment recast copyright as a bundle of discrete rights rather than an indivisible right, and made it possible for authors to assign some rights, such as the right to publish in a collective work, without relinquishing their remaining rights.⁴⁹

The Court then read section 201(c) in light of the importance of freelance authors' rights, and emphasized that the three privileges are circumscribed by the limiting word "only."⁵⁰ Quoting the legislative history of the Copyright Act amendment, the Court noted that the drafters of section 201(c) envisioned limited scenarios in which publishers could reproduce or distribute freelance authors' articles as parts of other collective works.⁵¹ In particular, the drafters anticipated the inclusion of articles from outdated encyclopedias in new, revised editions, or the republication of specific articles from old magazine issues in subsequent issues.⁵² According to the Court, the drafters did not intend section 201(c) to grant more expansive distribution and reproduction rights to publishers.⁵³ Thus, in the absence of a transfer of the copyright in the individual article from the freelance author to the publisher, section 201(c) acts as a default rule and, "if there is demand for a freelance article standing alone or in a new col-

45. *N.Y. Times Co. v. Tasini*, 121 S. Ct. 2381, 2387 (2001).

46. *Id.* at 2388.

47. *Id.*

48. *Id.*

49. *Id.* at 2388-89.

50. *Id.* at 2389.

51. *Id.*

52. *Id.*

53. *Id.*

lection, the Copyright Act allows the freelancer to benefit from that demand.”⁵⁴

Turning to the facts of the case, the Court noted that the publishers relied solely on the section 201(c) privilege to reproduce or distribute revisions of collective works.⁵⁵ In evaluating the publisher’s revision defense, the Court explained that the proper perspective was that of the database user.⁵⁶ Thus, the proper question was whether the electronic works as perceived by the user fell within the revision privilege.⁵⁷

The Court then analyzed the databases from the user’s perspective.⁵⁸ The section 201(c) revision privilege could not cover the databases, because they presented articles without the context of the original collective works.⁵⁹ In the text-based LEXIS/NEXIS and NYTO databases, the missing contextual-features included the graphics, formatting and other articles from the original publication.⁶⁰ The GPO database also failed to qualify as a revision, even though the user was presented with the entire pages on which an article originally appeared, because the user could not flip to other pages of the same periodical issue without conducting a new search for articles which happened to appear on those other pages.⁶¹ The tags identifying each article’s origins merely indicated that the article was previously part of a particular collective work, not that the database distributed the original collective work.⁶² Since none of the databases qualified as a revision, the Court declined to decide whether a section 201(c) privilege was transferable.⁶³

2. *The Dissent*

In his dissenting opinion, Justice Stevens began the analysis in a similar fashion to the majority, but quoted different sections of the legislative history to emphasize that Congress’ goal in enacting section 201(c) was “to keep publishers from ‘revising the contribution itself or including it in a new anthology or an *entirely different magazine or other collective*

54. *Id.*

55. *Id.* at 2390.

56. *Id.*

57. *Id.*

58. *Id.*

59. *Id.* at 2390-91.

60. *Id.* at 2391.

61. *Id.* at 2391-92.

62. *Id.* at 2391.

63. *Id.* at 2387 & n.5.

work.”⁶⁴ Thus, Stevens argued, Congress envisioned section 201(c) as providing freelance authors with rights over any changes to the contributed article or attempts to publish the article as part of a new and different selection of articles, but not over repackaging the collective work in a new medium.⁶⁵

Stevens separated the analysis of whether the databases were revisions into two questions: (1) whether the databases were revisions within the meaning of section 201(c); and (2) whether the aggregation of the electronic versions of the collective works altered the revision analysis.⁶⁶ In answering the first question, Stevens took an “incremental approach” and examined the process by which the publishers transmitted articles to database providers.⁶⁷ Because the articles from single issues of the periodicals were transmitted in a batch of files consisting of articles from only that issue, Stevens concluded that the electronic articles were proper section 201(c) revisions of the original printed works.⁶⁸ Stevens stressed that the principle of media neutrality—whereby the transfer of copyrighted material between different media does not alter the character of that material for copyright purposes—weighed in favor of the publishers and database providers, because the electronic medium itself necessitated many of the differences which the majority felt distinguished the databases from proper revisions.⁶⁹

In answering the second question, Stevens pointed out that aggregating revisions of collective works in large electronic databases cannot be distinguished from aggregating periodicals in a library or bookstore, an activity which does not constitute copyright infringement.⁷⁰ Stevens also noted that microfilm reproductions may contain multiple issues of a periodical, or issues from different periodicals.⁷¹ Therefore, aggregation of works in large databases did not alter Stevens’ analysis.⁷² Finally, Stevens argued that the majority’s focus on the database user’s experience was misplaced, and that media-specific necessities drove the details of database design

64. *Id.* at 2395-96 (emphasis in original) (quoting H.R. REP. NO. 94-1476, at 122-23 (1976), reprinted in 1976 U.S.C.C.A.N. 5738).

65. *Id.*

66. *Id.* at 2394.

67. *Id.* at 2397.

68. *Id.*

69. *Id.* at 2397-98.

70. *Id.* at 2400.

71. *Id.*

72. *Id.*

and function which the majority mistakenly characterized as distribution of articles standing alone.⁷³

III. DISCUSSION

The following analyzes *Tasini*'s analytical framework, and explores how the decision may affect developments in the electronic publishing industry.⁷⁴ Part III.A.1 evaluates the majority's statutory interpretation and focus on the user's perspective, and concludes that the Court correctly applied the relevant portions of the Copyright Act. Part III.A.2 discusses the potential legal effect of electronic databases' software components. The *Tasini* Court did not directly address this issue, but its focus on the user's perspective suggests that hidden software components will not factor into the analysis of electronic database cases. Part III.A.3 then examines how the focus on the user's perspective informs the prediction of what constitutes a proper electronic revision. It argues that while the Court's decision provides unclear guidance regarding some database navigational features, it also sets forth strict requirements that will limit publishers to facsimile reproductions of collective works. Finally, Part III.B discusses the aftermath of the litigation, and describes how search capabilities may be retained as a partial solution to the problem of database incompleteness.

A. The Contours of Liability in Electronic Database Copyright Cases

1. User's Perspective and Context

By approaching its section 201(c) analysis from the viewpoint of the database user, the Court chose the correct perspective based on the statutory law. As the Court noted, section 102 of the Copyright Act grants copyright protection only for works "fixed in any medium 'from which

73. *Id.*

74. Some issues relevant to a full predictive analysis are beyond the scope of this Note. First, whether a section 201(c) privilege is transferable remains undecided. *See id.* at 2387 & n.5. For an argument that a section 201(c) is not transferable, see Josh J. May, Note, *Tasini v. New York Times Co.*, 16 BERKELEY TECH. L.J. 13, 24-26 (2000). Second, the Register of Copyrights argued, in a letter sent to a Congressman that was subsequently published in the Congressional Record, that electronic databases display articles within the meaning of section 106(5) of the Copyright Act. *See Experts Weigh Tasini Ruling's Impact On Freelancers and Electronic Publishing*, PAT., TRADEMARK & COPYRIGHT J., October 19, 2001, at 557. Since section 201(c) does not contain a privilege for displaying copyrighted works, the Register argued that the database infringed the freelance authors' copyrights. *Id.* The Court acknowledged the Register's argument, but did not need to reach this issue in its opinion. *Tasini*, 121 S. Ct. at 2390 n.8.

they can be perceived, reproduced, or otherwise communicated.”⁷⁵ Copyright does not protect potential expressions; it only protects the perceptible, fixed expressions themselves.⁷⁶ The statutory definition of “fixed” is quite broad, allowing fixation in any form so long as it is stable, and making provision for later developed technologies.⁷⁷ However, it would go beyond the bounds of the fixation requirement to construe potential or hypothetical outputs of the databases in *Tasini* as being fixed and perceptible.⁷⁸ Rather, the databases merely serve as the hidden storehouses of articles while the fixed, perceptible expressions are the articles as actually presented to database users.

Standing at the center of the factual analysis and driving the ultimate result, the Court’s focus on the user’s perspective is perhaps the most informative aspect of its opinion. With this focus, the Court discounted the intermediate step of database production in which the print publisher sends a batch of text files of an issue’s articles to the database provider.⁷⁹ The dissent argued that the text files constitute a proper electronic revision.⁸⁰ Yet, a user never views this batch of files corresponding to a single periodical issue, but rather interacts with the database through search interfaces.⁸¹ The search may range from a simple one for author name, title, or publication date, to a potentially complex Boolean search of many terms.⁸² Regardless of the details of the search, the user is presented with a result-

75. *Tasini*, 121 S. Ct. at 2390 (quoting 17 U.S.C. § 102(a) (1994)). The Court also cited the definitions of “copies” and “fixed” from section 101, both of which repeat the quoted language of section 102 regarding perception of the work. *Id.* (citing 17 U.S.C. § 101 (1994)).

76. 17 U.S.C. § 102(a)-(b) (1994).

77. *Id.* § 101. The legislative history of the Copyright Act confirms that Congress intended a broad definition for “fixed,” partly to overrule *White-Smith Music Publ’g Co. v. Apollo Co.*, 209 U.S. 1 (1908), in which the Court held perforated paper rolls uncopyrightable as musical compositions because humans could not perceive them as music. H.R. REP. NO. 94-1476, at 52 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5665.

78. *See* Alice Haemmerli, *Commentary: Tasini v. New York Times Co.*, 22 COLUM.-VLA J.L. & ARTS 129, 142-43 (1998) (arguing that it is improper in a section 201(c) analysis to consider database structure or potential output, because copyright law has historically focused on perceptible presentations of works).

79. *Tasini*, 121 S. Ct. at 2391 n.9.

80. *Id.* at 2397 (Stevens, J., dissenting).

81. *Id.* at 2391.

82. A Boolean search relates search terms to one another with logical operators. *See* GERALD KOWALSKI, INFORMATION RETRIEVAL SYSTEMS: THEORY AND IMPLEMENTATION 27-28 (1997). For example, a search using two terms connected with a Boolean AND operator will return only articles containing both of the search terms. Other Boolean operators include OR and NOT. A user may combine many Boolean operators and search terms to achieve highly refined searches. *Id.*

ing list of articles which typically span many issues or publications.⁸³ The list of articles does not itself constitute infringement, since it simply consists of information identifying matching articles and not the texts of the articles themselves.⁸⁴ However, the list of articles enables the next step in the user experience—retrieval of individual articles—which does constitute infringement.⁸⁵

The Court's strict requirements for the necessary level of context properly protect freelance authors' rights in their individual articles. The context requirement serves as a sound dividing line between proper and improper electronic revisions by differentiating the presentation of entire collective works from the presentation of parts of them. Under the Court's reasoning, the text-only databases present an easy case of improper revision, because they lack even minimal context such as surrounding graphics. The Court also correctly held that the image-based GPO database was an improper revision, even though entire pages are presented in original format, because the original collective work consists of more than just the particular pages where an individual article appears. As the dissent pointed out, how much context is enough remains an open question.⁸⁶ However, under the Court's reasoning, if an image-based database were to allow the user to go directly to adjoining pages, and to view the entire collective work without conducting a new search, it should be found a proper section 201(c)-privileged work.

2. *Software Components*

All database products require at least a minimal software component to allow user interaction and viewing of the database contents.⁸⁷ Since software is itself subject to copyright protection, the addition of new software components to collective works in electronic databases raises a critical question: do these new components automatically sweep all electronic collective works databases into the infringing category? Most criticisms of the *Tasini* district court opinion have focused on that court's interpretation of section 201(c).⁸⁸ At least one commentator, however, has raised the

83. *Tasini*, 121 S. Ct. at 2391.

84. See discussion *infra* Part III.B.

85. *Tasini*, 121 S. Ct. at 2386.

86. *Id.* at 2397 (Stevens, J., dissenting); see discussion *infra* Part III.A.3.

87. See Rod Dixon, *Profits in Cyberspace: Should Newspaper and Magazine Publishers Pay Freelance Writers for Digital Content?*, 4 MICH. TELECOMM. TECH. L. REV. 127, 143 (1998), available at <http://www.mttl.org/volfour/dixon.pdf>.

88. See, e.g., Wendy J. Gordon, *Fine-Tuning Tasini: Privileges of Electronic Distribution and Reproduction*, 66 BROOKLYN L. REV. 473, 484-85 (2000) (arguing that the Second Circuit correctly reversed the district court based on a narrower interpretation of

software component issue by arguing that the court wrongly ruled in favor of the publishers because it failed to take account of these additional database components in its copyright analysis.⁸⁹

Additionally, several months prior to the Supreme Court's decision in *Tasini*, the Eleventh Circuit issued an opinion in *Greenberg v. National Geographic Society*,⁹⁰ in which it considered the legal effect of a database's software component. In that case, the National Geographic Society produced and sold a CD-ROM set of every printed issue of its magazine from 1888 to 1996.⁹¹ The magazine issues contained numerous photographs from freelance photographers.⁹² The CD-ROM product included digital replica images of the magazine issues and a computer program that served as a retrieval system for the images.⁹³ In dismissing an analogy between the CD-ROM-based database product and microfilm, the court pointedly noted that the combination of a collective work and a new copyrightable element such as software would "present an additional dimension in copyright analysis."⁹⁴ The Eleventh Circuit declined to decide the issue however, because the presence of other non-software components in the case was enough to render the database a new collective work which infringed the freelancers' copyrights.⁹⁵

Mention of the software component issue is notably absent from the majority and dissenting opinions in *Tasini*. It is unclear whether the Supreme Court may have considered the argument, since the parties did not raise it.⁹⁶ However, the Court noted the two other relevant issues which it

section 201(c)); John D. Shuff and Geoffrey T. Holtz, *Copyright Tensions in a Digital Age*, 34 AKRON L. REV. 555, 560-62 (2001) (same); Yuri Hur, Note, *Tasini v. New York Times: Ownership of Electronic Copyrights Rightfully Returned to Authors*, 21 LOY. L.A. ENT. L.J. 65, 89-90 (2000) (same); Josh J. May, *supra* note 74, at 21-24 (same).

89. Dixon, *supra* note 87, at 142-45.

90. 244 F.3d 1267 (11th Cir. 2001).

91. *Id.* at 1269.

92. *Id.*

93. *Id.*

94. *Id.* at 1273 n.12.

95. *Id.*

96. Nevertheless, the Court may have encountered the software component argument through both commentary and citation to *Greenberg*. See *supra* text accompanying note 89; Brief for Petitioners at 46, *N.Y. Times Co. v. Tasini*, 121 S. Ct. 2381 (2001) (No. 00-201) (citing *Greenberg v. Nat'l Geog. Soc'y*, 1999 U.S. Dist. LEXIS 13874 (S.D. Fla. 1999), *rev'd*, *Greenberg v. Nat'l Geog. Soc'y*, 244 F.3d 1267 (11th Cir 2001), *cert. denied*, 122 S. Ct. 347 (2001)), available at <http://www.nwu.org/tvt/sc-nyt.pdf> (last visited Feb. 10, 2002).

did not decide,⁹⁷ suggesting that the failure to mention the software component issue means it is comparatively less important to a section 201(c) analysis.

In combination with the Court's focus on the user's perspective, the absence of any mention of the software components suggests that this "additional dimension" may not factor into the analysis of electronic collective works cases. This flows from the focus on the user's perspective, because the critical question in that analytical framework is not whether there are hidden copyrightable additions to the collective work, but whether normal use of the database involves the presentation of individual works. Nevertheless, the Court's silence means that this critical issue remains unresolved.

3. *Predicted Infringing and Noninfringing Databases*

Strict adherence to *Tasini*'s exacting standards will be required for any future attempts to design compliant databases. The publishers argued that the concept of media neutrality excused the differences between the original collective works and the database products.⁹⁸ Underlying this argument, as the dissent discussed at length, is the sense that limitations of computer storage and information processing capacities necessitate database features such as the delivery of individual articles rather than full collective works.⁹⁹ The Court rejected this argument, suggesting that database design was driven more by market demand for individual articles than any limitations of computer technology.¹⁰⁰ Clearly, after *Tasini*, courts will not be sympathetic to arguments based on technical limitations.

The Court's analysis makes it difficult to imagine any text-only product which would escape infringement, because the computer text format makes no provision for nontextual features such as page formatting or im-

97. The other issues are transferability of a section 201(c) privilege and whether electronic databases infringe by displaying articles within the meaning of section 106. See *supra* note 74.

98. *N.Y. Times Co. v. Tasini*, 121 S. Ct. 2381, 2392 (2001); see case summary *supra* Part II.C.2.

99. *Tasini*, 121 S. Ct. at 2398 n.9 (Stevens, J., dissenting) (noting that, in the case of GPO, "the demands that memory-intensive graphics files can place on underpowered computers make it appropriate for electronic publishers to divide the larger collective work into manageably sized subfiles.").

100. *Id.* at 2392 n.11 ("We lack the dissent's confidence that the current form of the Databases is entirely attributable to the nature of the electronic media, rather than the nature of the economic market served by the Databases.").

ages.¹⁰¹ The text format is technically attractive because of its minimal use of computer resources and the ease with which text documents can be electronically manipulated. For example, computer search functions invariably use the text format to scan for matching words in documents.¹⁰² However, the same features which make computer text technically attractive also leave no simple way to encode all of the contextual features of the original work that the Court deems essential to a noninfringing database.¹⁰³ Even the dissent's example of a text file of an entire issue's articles would infringe because it would lack the original arrangement of the articles and accompanying pictures.¹⁰⁴ Consequently, publishers should avoid text-only solutions despite their technical advantages.

Noninfringing product designs will most likely be image-based solutions, similar to the GPO database, which present facsimiles of the original publication. As the Court noted, the GPO product allows the user to view the entire pages on which the selected articles appear; what is lacking is the ability to easily view adjoining pages and other pages of the collective work.¹⁰⁵ A noninfringing product must provide the user with the navigational flexibility to move to any of the collective work's pages, and must present the entire original collective work.

Of course, readers of print publications are not limited to paging through the publications sequentially, so electronic databases will most likely be allowed to provide users with the ability to jump to specific pages. A more difficult question is whether navigational aids which help, but do not force, the user to follow an article through nonconsecutive pages would satisfy the Court's context requirements. Publishers could

101. The standard text encoding scheme, ASCII, simply assigns the numbers zero to 127 to alphanumeric and punctuation characters. *See supra* note 22.

102. *See* KOWALSKI, *supra* note 82, at 2 (“[T]ext . . . has been the only data type that [has] lent itself to full functional processing.”).

103. Page formatting and images must be encoded, if at all, by extending the code with mark-up commands. The Hypertext Markup Language (“HTML”) is one widely used standard on the Internet, and is recognized by Internet browser programs such as Netscape Communicator or Microsoft Internet Explorer. *See HyperText Markup Language Home Page*, at <http://www.w3.org/MarkUp> (last visited Feb. 10, 2002). Mark-up commands exist in text format in the document file, but the browser programs interpret them and alter the display of the document accordingly. While HTML provides for a variety of formatting features, its designers did not envision using it to produce electronic facsimiles of print publications. Consequently, the appearance of an HTML-encoded document will vary, sometimes drastically, with the particular browser software and user-controlled settings. HTML is therefore unlikely to enable compliance with all of *Tasini*'s requirements.

104. *Tasini*, 121 S. Ct. at 2399 (Stevens, J., dissenting).

105. *Id.* at 2391-92.

provide such a navigational capability by allowing unrestricted browsing through the collective work page by page, but also providing an option to skip directly to the next page containing the continuation of a particular article's text. This skipping feature might be supplied via a button bar, placed to the side of the document window, which both lists and links to all the pages containing portions of the current article. The button bar seems to satisfy the Court's requirements, because the user may still browse through the entire collective work at will. However, the Court could plausibly view the feature as restricting the user experience to a single article. Regardless of the uncertain legality of the multi-function button bar, database designers must at least be careful not to add navigational features which completely restrict the user experience to single articles.

The majority's dismissal of the dissent's media neutrality argument is wise not only because there is "no grounding in § 201(c) for a 'medium-driven' necessity defense,"¹⁰⁶ but also because the state of computer technology is highly dynamic. Storage and processing capacities are expanding at breathtaking speed.¹⁰⁷ What was impractical a short time ago becomes practical as prices drop and technology improves.¹⁰⁸ In addition, creative software solutions sometimes achieve unexpected breakthroughs.¹⁰⁹ In the GPO database, images of the original works were stored as raw image files of each printed page.¹¹⁰ In this format, the product required vast storage space for each issue.¹¹¹ In the years after the design of GPO, market demand for electronic publications has fostered the creation of new electronic formats which use computer storage much more efficiently, while still presenting users with print publication-like facsimi-

106. *Id.* at 2392 n.11.

107. See Peter Leyden, *Moore's Law Repealed, Sort Of*, WIRE, May 1997, at 166 (reporting that Intel co-founder Gordon Moore, whose 1965 prediction that processing power would double every eighteen months has held true so far, foresees surmountable challenges and continued advances in the years ahead), available at http://www.wired.com/wired/archive//5.05/ff_moore.2_pr.html (last visited Feb. 10, 2002); *The Art of the Quantum Leap*, ECONOMIST, Dec. 8, 2001, at 19 (recounting the technical breakthroughs that led to rapid increases in computer hard disk storage capacities).

108. See Ira Sager et al., *The Mother of All Price Wars*, BUSINESS WEEK, July 30, 2001, at 32 (reporting deep price cuts in the personal computer industry).

109. See *infra* notes 112-113 and accompanying text.

110. *Tasini*, 121 S. Ct. at 2386.

111. *Id.* at 2398 n.9 (Stevens, J., dissenting) ("The GPO version of the April 7, 1996, New York Times Magazine, for example, would demand in the neighborhood of 200 megabytes of memory if stored as a single file . . .").

les.¹¹² Modern electronic document formats conserve computer resources relative to raw image files through mathematical representation of fonts and graphics, as well as compression of images.¹¹³ These formats may be the ideal compromise between design efficiency and *Tasini*'s stringent requirements.

B. Partial Solution to the Database Incompleteness Problem

In the wake of the Second Circuit's *Tasini* decision in favor of the freelance authors, scholars warned of potentially drastic consequences for the completeness and integrity of electronic archives.¹¹⁴ The scholars predicted that publishers would remove infringing works from databases rather than embark on the difficult task of finding freelance authors and negotiating for electronic rights.¹¹⁵ In the scholar's view, the resulting loss would devastate the research community which had come to depend on electronic archives.¹¹⁶ However, commentators reminded the legal community that collective rights organizations had formed to address the problem of administrative efficiency in other industries such as music, and could address the problems in this case.¹¹⁷ Such organizations lower the high transaction costs associated with situations involving many different copyright owners by negotiating standard contracting terms and providing a centralized mechanism for licensing and enforcement.¹¹⁸ Indeed, the Court pointed to the possibility of this type of arrangement in dismissing the "dire predictions" of the publishers, supportive amici curiae, and the dissent.¹¹⁹

112. One example is Adobe Corporation's Portable Document Format ("PDF"), a universal file format which can be viewed using Adobe's free Acrobat Reader software. See *Adobe PDF*, at <http://www.adobe.com/products/acrobat/adobepdf.html> (last visited Feb. 10, 2002). Another example is the public domain compressed image file format JPEG established by the Joint Photographic Experts Group. See *Welcome to JPEG*, at <http://www.jpeg.org/public/jpeghomepage.htm> (last visited Feb. 10, 2002).

113. See L. Leurs, *The PDF Format: Compression*, at <http://users.belgacom.net/prepresspanic/pdf/info/compression.htm> (last visited Feb. 10, 2002).

114. See Brief of Amici Curiae Ken Burns et al. at 5-14, *N.Y. Times Co. v. Tasini*, 121 S. Ct. 2381 (2001) (No. 00-201), available at <http://www.nwu.org/tvt/sc-burns.pdf> (last visited Feb. 10, 2002)

115. See *id.*

116. See *id.*

117. See May, *supra* note 74, at 26-29; Robert Meitus, Note, *Interpreting the Copyright Act's Section 201(c) Revision Privilege with Respect to Electronic Media*, 52 FED. COMM. L.J. 749, 773-76 (2000).

118. See generally Robert P. Merges, *Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations*, 84 CAL. L. REV. 1293 (1996).

119. *Tasini*, 121 S. Ct. at 2393.

Unfortunately, the conduct of the parties after the Supreme Court decision does not bode well for a quick resolution of the issue. Immediately following the ruling, the New York Times removed 115,000 articles from its on-line database, and published advertisements offering to restore the articles if authors waived all past and future claims.¹²⁰ The authors responded by running their own advertisements, demonstrating in front of the Times' headquarters, and filing another suit alleging that the Times was forcing authors to sign waivers by threatening to withhold future freelance assignments.¹²¹ Although the Times has required express transfer of electronic rights in freelance contracts since 1995,¹²² it may be concerned that the establishment of a collective rights organization would make it difficult to refuse additional compensation for these rights in new contracts. Hence, the dispute over remedies has many dimensions which may lead to a protracted new phase of litigation.

Even in the absence of a resolution which makes the articles at issue available in archival databases, the gap in the record need not be nearly as large or as complete as argued by the scholars and publishers. First, only freelance articles published from 1978 to the early 1990s are affected.¹²³ Even these freelance articles may be provided if packaged in an electronic version of the entire original collective work that is noninfringing.¹²⁴

Moreover, even if publishers are concerned about attempting to design noninfringing database products given the uncertainty in the Court's opin-

120. Tamara Loomis, *Aftermath of Tasini: Damages at Issue After U.S. Supreme Court Ruling*, N.Y.L.J., July 12, 2001, at 5.

121. *Id.*

122. *Tasini*, 121 S. Ct. at 2402 (Stevens, J., dissenting). Note that authors or their survivors have the inalienable power to terminate transfers of electronic rights between thirty-five and forty years from the execution of the freelance contracts. 17 U.S.C. § 203(a)(3) (1994). Congress retained this provision of earlier copyright law in the 1976 Act partly because of authors' weak bargaining positions "resulting in part from the impossibility of determining a work's value until it has been exploited." H.R. REP. NO. 94-1476, at 124 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5740. Hence, the current dispute may repeat, on a potentially larger scale, in several decades.

123. The Copyright Act went into effect on January 1, 1978. 17 U.S.C. § 301(a) (1994). Most publishers have obtained express transfers of electronic rights from freelance authors since the *Tasini* litigation brought the issue to the fore in the early 1990s. See George H. Pike, *Understanding and Surviving Tasini*, INFO. TODAY, Oct. 1, 2001, at 18.

124. It is unclear whether publishers would favor providing electronic versions of entire collective works, since presumably the user would be purchasing the product to read one article, and may be reluctant to pay more than the market rate for one article. However, given the alternative of no revenue, publishers might accept this scenario as the best possible business practice.

ion, the search capabilities of electronic databases may be retained to inform researchers that relevant articles exist.¹²⁵ This result follows from the data structure of electronic database systems, which consists of the articles themselves and a file called the inverted file index.¹²⁶ The inverted file index is so named because it contains an inversion list of terms, or a list of terms with pointers to each article in which the terms occur.¹²⁷ For example, the inverted file index for a database of legal news publications might contain the terms "electronic" and "database." Each of these terms will have pointers to articles that contain that term.¹²⁸ When a user executes a Boolean search for articles containing both terms (i.e. searches for articles containing "electronic" AND "database"), the database system compares the terms' pointers in the inverted file index and returns a list of articles that appear under both terms.¹²⁹ Inverted file indices may be preserved by database providers even if the article texts are completely expunged, because they exist separately from the articles themselves and contain only author names, titles, publication names, dates, and searchable terms, all of which are not subject to copyright.¹³⁰ While this partial solution does not address researchers' efficiency concerns, since electronic versions of articles themselves will not be delivered, it at least ensures that researchers will not remain unaware of relevant articles.

IV. CONCLUSION

The Supreme Court's ruling in *Tasini* reaffirmed the importance of authors' rights in modern American copyright law. In resolving the competing rights of freelance authors and publishers of collective works, the Court initiated a long process of adjustment in the electronic database industry. Although many issues remain undecided even after the decision, the Court's identification of the user's perspective as the proper frame of

125. See Barbara Quint, *Let's Stop the Trash Trucks*, INFO. TODAY, Sept. 1, 2001, at 8 (proposing that inverted file indices may be retained by database providers without risk of copyright infringement, thereby providing searchers with full search results if not full text).

126. See KOWALSKI, *supra* note 82, at 76-79.

127. See *id.*

128. See *id.*

129. See *id.*; see also Quint, *supra* note 125.

130. See 37 C.F.R. § 202.1(a) (2001) ("Words and short phrases such as names, titles, and slogans" are not subject to copyright); *Feist Publ'ns v. Rural Tel. Serv.*, 499 U.S. 340, 344-45 (1991) ("The most fundamental axiom of copyright law is that 'no author may copyright his ideas or the facts he narrates.'") (quoting *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 556 (1985)); see also Quint, *supra* note 125.

reference enables prediction of the boundaries of infringement in electronic database cases.

Interested parties have debated the issues of *Tasini* in highly polarized terms, but many possible middle paths exist. These moderate and admittedly partial solutions—ranging from the design of noninfringing revisions to retention of database search functions—mitigate the potentially harsh consequences of the ruling.

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