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Eligibility for Copyright Protection: A Search for Principled Standards

Ralph S. Brown*

INTRODUCTION

The Semiconductor Chip Protection Act of 19841 appears in Title 17 of the United States Code, entitled "Copyrights." Yet, the protection afforded by the Act is not traditional copyright protection. Though similar to copyright in important respects,2 it is a sui generis scheme.3 A bill supported by the Senate Committee would have inflicted a score of amendments on the copyright statute itself in order to protect chips.4 Fortunately, the sui generis approach that emerged from the House Committee prevailed.5 That copyright protection was seriously considered at all, and the persistence of copyright elements in the enacted statute, stimulate speculation about the proper scope of copyright protection.

This Article considers several ways to appraise eligibility

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5. See H.R. 5525, 98th Cong., 2d Sess., 130 CONG. REC. H5489-91 (daily ed. June 11, 1984); see also Samuelson, supra note 2, at 484-86 (discussing the House Committee approach).
for copyright protection. To set the stage, in Part I it briefly considers the subject matter of copyright and the five exclusive rights granted to copyright owners under the present system. Subject matter and rights serve as a framework in which to discern areas of inclusion and exclusion from protection—either through legislative choice, judicial interpretation, or the hard knocks of widespread infringement. Within this framework, we will also glimpse how the boundaries of rights have shifted through time as new technologies and marketing strategies have developed.

Part II describes three principled approaches to questions of eligibility. They do not entirely harmonize with each other. One exalts the rights of the author; it has natural law foundations in the European droit d'auteur. The second is the constitutionally-derived position of the Supreme Court, which balances the need for incentives to authorship against the public's need for ready access to published works. The third is the economists' view, in which copyright prevents the free distribution of public goods, and accordingly needs to be closely constrained.

Among the applications of these principles discussed in Part II, particular attention is directed to the two major exclusions from copyright that are closely related to the sui generis treatment of chip masks. One is the sweeping mandate expressed in section 102(b) of the copyright statute:

(b) 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.  

The Chip Act does not quarrel with this policy at all. The other exclusion, the long-standing barrier against recognition of copyright in useful articles, more than anything else made it inappropriate to incorporate the desired protection for mask designs into the copyright statute; for a chip mask is indubitably a useful article.

The Article concludes that the integrity of future copyright law depends on insuring that changes in the law do not occur at the expense of distorting the policies underlying copyright.

I. WRITINGS AND RIGHTS

Federal copyright law owes its existence to the copyright-
patent clause of the Constitution, which empowers Congress 
"[t]o promote the Progress of Science and useful Arts, by secur-
ing for limited Times to Authors and Inventors the exclusive 
Right to their respective Writings and Discoveries." Congress 
has interpreted the term "writings" generously when fulfilling 
its constitutional mandate. The first copyright statute, of 1790, 
listed maps and charts ahead of books in its short list of pro-
tected "writings." In the 1976 thorough revision of copyright 
law, the constitutional protection of "writings" became a pro-
tection that "subsists . . . in original works of authorship fixed 
in any tangible medium of expression, now known or later de-
developed, from which they can be perceived, reproduced, or 
otherwise communicated, either directly or with the aid of a 
machine or device." This language insures that copyright is 
receptive to new technologies, provided that fixation and com-
munication are possible. The language, however, does not em-
brace the full possible reach of "writings" because protection 
"subsists, in accordance with this title"—a phrase that invokes 
all the limitations and exclusions of the rest of the Act—espe-
cially sections 108 through 118 of chapter 1, Subject Matter and 
Scope of Copyright.

In the 1976 statute, two major categories of writings—in 
the broad constitutional sense—fail of protection. The first is 
right up front in the statute. Following the terse list of in-
cluded categories in section 102(a) comes the vigorous and, I

7. U.S. CONST. art. I, § 8, cl. 8.
8. See, e.g., Goldstein v. California, 412 U.S. 546, 561 (1973) (the term 
"writings" includes "any physical rendering of the fruits of creative intel-
lectual or aesthetic labor"); Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53, 
58 (1884) (photographs are covered by copyright law "so far as they are repre-
sentatives of original intellectual conceptions of the author"); Harcourt, Brace 
(answer sheets designed for use with student achievement and intelligence 
tests qualify as writings to the extent they "contain sufficient originality in 
their design" because the term "writings . . . is intended to be read 
expansively").
9. See Act of May 31, 1790, § 1, 1 Stat. 124, 124.
fied as amended at 17 U.S.C. §§ 101-810 (1982)).
12. Id.
13. Works of authorship include the following categories:
(1) literary works;
(2) musical works, including any accompanying words;
(3) dramatic works, including any accompanying music;
(4) pantomimes and choreographic works;
(5) pictorial, graphic, and sculptural works;
will argue undervalued, negative admonition of section 102(b), already quoted.\textsuperscript{14}

The other major denial of copyright protection is more oblique. It is the bar against copyright in useful articles, which must be pursued through section 113, on the scope of rights in pictorial, graphic, and sculptural works,\textsuperscript{15} back into the definitions section, section 101, which, along with other land-mines and spring-guns, includes an attempt to define "useful article,"\textsuperscript{16} and, in the definition of "pictorial, graphic, and sculptural works," fires off an exclusion of "their mechanical or utilitarian aspects."\textsuperscript{17} In another fulmination, this overburdened definition demands that design features of a useful object, to be protectable, "can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article."\textsuperscript{18} Thus, to take the most striking example, fabric designs are copyrightable; you can hang them decoratively but uselessly on a wall.\textsuperscript{19} On the other hand, a dress design is not, because the shape and function of a dress make it a useful object. We will return to these issues.

The present reach of the statute can give guidance whether additional "writings" \textit{should} be brought into the statutory scheme, or whether their inclusion would instead damage copyright principles. But that reach is only partly defined by subject matter. It is equally important to look at the kinds of rights that the statute grants or qualifies and to ask also whether the author's rights are respected.

The starting point for this examination is section 106 of the 1976 Copyright Act, which lists the five exclusive rights\textsuperscript{20}

\begin{itemize}
  \item (6) motion pictures and other audiovisual works; and
  \item (7) sound recordings.
\end{itemize}

\textsuperscript{14} See supra text accompanying note 6.
\textsuperscript{15} 17 U.S.C. § 113 (1982) (copyright may not cover "useful articles").
\textsuperscript{16} According to § 101, "[a] 'useful article' is an article having an intrinsic utilitarian function that is not merely to portray the appearance of the article or to convey information." 17 U.S.C. § 101 (1982).
\textsuperscript{17} Id.
\textsuperscript{18} Id.

\textsuperscript{19} Richard H. Stern, a prominent attorney specializing in intellectual property law, has pointed out that one also sees Japanese kimonos hung on walls as decorations; but that does not vitiate the proposition that apparel is basically "useful." Letter from Richard H. Stern to Ralph S. Brown (Aug. 14, 1985) (copy on file at the Minnesota Law Review).

\textsuperscript{20} See 17 U.S.C. § 106 (1982). The Constitution refers in the singular to the "Right" that Congress can grant to authors. See U.S. CONST. art. I, § 8, cl. 8. This constraint, however, has been unheeded by the drafters of copyright
COPYRIGHT PROTECTION

granted to copyright owners. The first of these is the right to reproduce the work. This right, the historical foundation upon which copyright law rests, afforded authors virtually ironclad protection until recently when two new technologies, inexpensive photocopying and tape recording, significantly undermined it.

The second exclusive right granted copyright owners under section 106 is the right "to prepare derivative works based upon the copyrighted work." This right appears to be flourishing, having come a long way since the early days when copyright protected only against literal copying, and abridgement or translation was viewed as a useful endeavor needing no permission from the author.

statutes who from the beginning have granted rights to authors. For example, the first American copyright statute conferred "the sole right and liberty of printing, reprinting, publishing and vending," see Act of May 31, 1790, ch. 15, § 1, 1 Stat. 124, 124, and the present statute grants authors five exclusive rights, see 17 U.S.C. § 106(1)-(5) (1982).


22. While it is commonly observed that there is a great deal of unauthorized photocopying, the extent of harm to copyright owners is in dispute. See Register of Copyrights, Library Reproduction of Copyrighted Works, supra note 17, at app. I (1983); Liebowitz, Copying and Indirect Appropriability: Photocopying of Journals, 93 J. POL. ECON. 945, 947-49 (1985).

23. See Nimmer, Copyright Liability for Audio Home Recording: Dispelling the Betamax Myth, 68 VA. L. REV. 1505 (1982). Another recent technological advance from Japan, a machine capable of copying the contents of a videotape directly onto a blank tape, has the movie industry understandably worried. See Valenti, A Film Ripoff By the Japanese, N.Y. Times, Mar. 6, 1985, at A23, col. 1. It will soon be possible to rent a videotaped movie or other copyrighted material from a tape rental outlet and make copies for a fraction of the established purchase price. It seems unlikely that such copying would come within the rationale of Sony Corp. of Am. v. Universal City Studios, 464 U.S. 417 (1984), that no harm occurs by home taping of broadcast material for time-shifting. Id. at 451-56. It is doubtful that videotape copying can be effectively policed, and a resurgence of calls on Congress to provide a form of remuneration by taxing the recording machines and blank tape can be expected. See infra note 31. In the meantime, controversy over the proper scope of the fair use exemption in Sony persists. See Carter, Copyright Protection, the Right to Privacy, and Signals that Enter the Home, 3 CARDOZO ARTS & ENTERTAINMENT L.J. 289, 290-93 (1984); Cirace, When Does Complete Copying of Copyrighted Works for Purposes Other Than for Profit or Sale Constitute Fair Use? An Economic Analysis of the Sony Betamax and Williams & Wilkins Cases, 28 ST. LOUIS U.J. 647, 667-81 (1984); Raskind, A Functional Interpretation of Fair Use, 31 J. COPYRIGHT SOC'Y 601, 616-19 (1984).


25. See B. KAPLAN, AN UNHURRIED VIEW OF COPYRIGHT 9-12 (1967). For an example of the long reach of the modern right to prepare derivative works, see Lone Ranger Television v. Program Radio Corp., 740 F.2d 718, 721-23 (9th Cir. 1984).
More in flux than the right to prepare derivative works is the third right, "to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending."26 Although the right appears quite comprehensive, it is limited by the "first sale" doctrine.27 This doctrine, codified in section 109 of the 1976 Act, holds that the purchaser of a "particular copy" of a copyrighted work may sell or otherwise transfer that copy without permission of the copyright owner.28 The doctrine at first seems simple enough. If you have bought a book, surely you can freely lend it or sell it, just as you can a car; but you cannot copy or perform the book. Recent marketing developments,29 however, have provoked challenges to "first sale." Consider the rental business for videotapes. Because copyright owners are powerless to halt rentals after the first sale, the public is able to rent movies for under five dollars rather than purchase them for fifty dollars. Movie magnates might have foreseen such a thwarting of their expectations; instead, they have turned to Congress in an effort to change the first sale doctrine30—so far without success. Similarly, until recently it was possible to rent a phonorecord from a music rental store and record it on a

28. The House Report on the bill that became the 1976 Act explained the first sale doctrine as follows:

Thus, for example, the outright sale of an authorized copy of a book frees it from any copyright control over its resale price or other conditions of its future disposition. A library that has acquired ownership of a copy is entitled to lend it under any conditions it chooses to impose. This does not mean that conditions on future disposition of copies or phonorecords, imposed by a contract between their buyer and seller, would be unenforceable between the parties as a breach of contract, but it does mean that they could not be enforced by an action for infringement of copyright. Under section 202 however, the owner of the physical copy or phonorecord cannot reproduce or perform the copyrighted work publicly without the copyright owner's consent.


29. See supra notes 21-23 and accompanying text.
30. See S. 33, 98th Cong., 1st Sess., 129 CONG. REC. S261 (daily ed. Jan. 26, 1983). This bill would proscribe unauthorized rental, lease, or lending, for commercial advantage, of copies of motion pictures or other audiovisual works.
blank tape at a cost far lower than the retail price of the phonorecord. This practice differs sharply from simply renting and returning a movie; an unauthorized copy results. The audio interests, with their pitch that such rentals were no more than a primrose path to piracy, persuaded Congress to amend section 109; it now makes rental, lease, or lending of phonorecords an act of civil infringement.\textsuperscript{31} This change is doubtlessly defensible to curb copying; it will require further exploration to establish a rationale for letting movie makers broaden their copyright to control rentals that appear to benefit the public.

The fourth exclusive right granted to copyright owners is the right to "perform the copyrighted work publicly."\textsuperscript{32} As long as the "copyrighted work" is thought of as a musical or dramatic composition, this performance right is of long standing.\textsuperscript{33} A much thornier issue arises, however, when performers of specific renditions of a composition seek the protection of the copyright laws, asserting a "performance right" in their interpretive rendition of the author's composition.\textsuperscript{34}

The displacement of live musicians by the ubiquitous playing of records over the radio spurred claims for such perform-

\textsuperscript{31} See Record Rental Amendment of 1984, Pub. L. No. 450, 98 Stat. 1727 (codified at 17 U.S.C. § 109 (Supp. II 1984)). Perhaps this relief is already considered ineffectual, because of the recent availability of "dubbing decks," which easily copy cassettes. See Pantel, Dubbing Decks: Pro and Con, N.Y. Times, Oct. 20, 1985, § 2 (Arts & Leisure), at 23. Legislation has been introduced that would impose taxes on tape decks, dubbing decks, and blank tape, the proceeds of which would be distributed to copyright owners. A license to copy would be conferred on users of the taxed equipment. See H.R. 2911, 99th Cong., 1st Sess., 131 CONG. REC. H5227 (daily ed. June 27, 1985).


\textsuperscript{33} An author's right to authorize performances of original work has long been recognized both under the common law, see, e.g., Ferris v. Frohman, 223 U.S. 424, 435-36 (1912), and under federal statutes, see, e.g., Act of Aug. 18, 1856, ch. 169, 11 Stat. 138 (dramatic performance right); Act of Jan. 6, 1897, ch. 4, 29 Stat. 481 (musical public performance right). The § 106(4) performance right in the current statute is limited, however, by § 110's odd collection of exemptions. See infra notes 81-86 and accompanying text.

\textsuperscript{34} Such performers' rights historically and conceptually have not been part of American copyright law. In Europe, performers' rights, while not a part of copyright, are nonetheless recognized as "neighboring rights." See, e.g., S. STEWART, INTERNATIONAL COPYRIGHT AND NEIGHBOURING RIGHTS 181-86 (1983). Much learning has been lavished on the location of the boundary between these neighboring rights, or "droits voisins," and copyright, as well as on the scope of the protection granted to authors by neighboring rights. See generally id. at 176-77 ("Droit voisins" developed as new communication media rendered the personal rights of "droit d'auteur" impracticable.).
ers' rights fifty years ago. These claimants would exact a licensing fee from broadcasters of the phonorecords who were already, albeit reluctantly, paying the American Society of Composers, Authors, and Publishers for licenses to broadcast the recorded songs. Although the Supreme Court of Pennsylvania in 1937 held that a common law performers' right exists, Judge Learned Hand's opinion in the 1940 case of RCA Manufacturing Co. v. Whiteman turned the tide against judges creating such a right. Twenty years later, the spread of unauthorized duplications of records and tapes spurred both state and federal legislation proscribing such "dubbing." Federal law, however, granted a narrow right, protecting only against unauthorized duplication. It does not protect against imitation or simulation of the rendition; and the long-sought right against unauthorized performance is still withheld. Despite the Copyright Office's 1978 recommendation that such performers' rights be created, Congress has yet to agree, and the listening public continues to enjoy the Top Forty over the air without having to pay the pipers.

The last and least, in economic importance, of the statutory rights is the right "to display the copyrighted work publicly." New in the 1976 Act, this right does not proscribe much that would not also be considered copying or performing. Further, what protection it does provide is limited by the "face-to-face" teaching exemption in section 110(1) and the first sale doc-

35. See Note, Rights of Performers and Recorders Against Unlicensed Record Broadcasts, 49 Yale L.J. 559, 563-64 (1940).
41. See 43 Fed. Reg. 12,763 (1978). Under this proposal, broadcasters would pay a compulsory license fee, with the proceeds being shared by record companies and performers. Id. at 12,766-68.
43. This section provides that copyright is not infringed by the performance or display of a work by instructors or pupils in the course of face-to-face teaching activities of a nonprofit educational institution, in a classroom or similar place devoted to instruction, unless, in the case of a motion picture or other audiovisual work, the performance, or the display of individual images, is given by means of
According to the House Report, the interplay between the section 106(5) display right and the section 109(b) first sale doctrine results in the proscription of "indirect" displays only.\textsuperscript{45} Persons who have purchased works without restrictions may display the works privately or in galleries, but, in view of the "potentialities of the new communications media," a transmitted display of a visual image of a copyrighted work "from one place to members of the public located elsewhere" is not allowed.\textsuperscript{46} The apparent intention is to curb only those displays, such as televised displays, that would impair the artist's market for reproductions of the work.\textsuperscript{47}

Professor Thomas Goetzl and Stuart Sutton challenge this position in a recent article, boldly suggesting that an artist should be entitled to a compulsory license fee whenever his or her work is exhibited publicly in any manner.\textsuperscript{48} They would further create a private display right—buying a picture would not even give the buyer the right to look at it. Perhaps realizing that such a proposal stands little chance of success, they are willing to settle instead for a federal "follow-up right," derived from the French \textit{droit de suite} and the California Resale Royalties Act.\textsuperscript{49} The resale royalty is intended to give the artist a

\begin{enumerate}
\item a copy that was not lawfully made under this title [17 U.S.C. § 101 et seq.], and that the person responsible for the performance knew or had reason to believe was not lawfully made . . . .
\item See supra notes 27-31 and accompanying text.
\item Id. at 80, 1976 U.S. CODE CONG. & AD. NEWS at 5694. Note that under § 109(b) the exemption extends only to those public displays that are made "either directly or by the projection of no more than one image at a time," thus proscribing the simultaneous projection of multiple images of the copyrighted work. Id.
\item As explained in the Report, the committee's intention was to preserve the traditional privilege of the owner of a copy to display it directly, but to place reasonable restrictions on the ability to display it indirectly in such a way that the copyright owner's market for reproduction and distribution of copies would be affected. Unless it constitutes a fair use under section 107, or unless one of the special provisions of section 110 or 111 is applicable, projection of more than one image at a time, or transmission of an image to the public over television or other communication channels, would be an infringement for the same reasons that reproduction in copies would be.
\item See Goetzl & Sutton, supra note 28, at 17-18.
\item See CAL. CIV. CODE § 886 (West 1982 & Supp. 1985). The California Act is based on the \textit{droit de suite} which exists in the copyright laws of France,
\end{enumerate}
share in the realized appreciation in value of his or her work. Goetzl and Sutton would rather characterize the payment as a license for the buyer to display and view the work of art.

They support this position by analogizing the grant of a follow-up right to the erosion of the first-sale doctrine that has occurred in the phonorecord industry. They also invoke the existence of a public lending right in England and a few other European countries, which measures readership of books lent by public libraries and pays a fee to authors from public funds. The public lending right, however, appears more to resemble the film makers' so far fruitless claim to a share of videotape rental proceeds than it does the artists' claims to follow-up rights from "compensable events."

While there are conceptual and practical distinctions between these different types of claims to post-sale rights, they appear to be functionally similar in that they would all restrict the use of the copyrighted work. The right to control the use of a work, although granted to inventors, has never been part of copyright except as performance may be considered "use." Indeed, the absence of a "use right" helps justify the relatively

Italy, Germany, and other countries. See 2 M. Nimmer, supra note 3, at § 8.22[A]. Droit de suite can be roughly translated as "the right of an artist to 'follow' or participate in the proceeds realized from the resale of the tangible embodiment of [the] work." Id. (footnote omitted). For a discussion of the applicability of the doctrine to American copyright law, see generally Price, Government Policy and Economic Security for Artists: The Case of the Droit de Suite, 77 Yale L.J. 1333, 1337-52 (1968); Solomon & Gill, Federal and State Resale Royalty Legislation: "What Hath Art Wrought?", 26 UCLA L. Rev. 322, 335-57 (1978).

50. See supra note 31 and accompanying text.

51. Goetzl & Sutton, supra note 28, at 29 n.54; see Seeman, A Look at the Public Lending Right, 30 Copyright L. Symp. (ASCAP) 71 (1983). The European public lending right provisions, except West Germany's, however, are independent of copyright. Cf. id. at 91.

52. Goetzl and Sutton use the term "compensable event" to signify any event occurring after the initial sale of a copyrighted work to which a right might be attached. See Goetzl and Sutton, supra note 28, at 16. Thus, under the provisions of the California resale royalty system, discussed supra note 49 and accompanying text, most sales of a work of fine art would be compensable events.

In contrast to "compensable events" that may be difficult to realize, recent legislation in California, Massachusetts, and New York assures visual artists their right to claim or disclaim authorship of their works and, to a limited extent, a right against mutilation or destruction of the work. See R. Brown & R. Denicolà, supra note 36, at 591-93. Assertion of the paternity right should be essentially costless. The integrity right, however, may impose burdens on the owners of art works.

casual approach to granting copyright as opposed to the more searching tests for patentability.\footnote{See R. Brown & R. Denicola, \textit{supra} note 36, at 76-80 ("Note on Standards for Copyrights and Patents").}

**II. SEARCHING FOR PRINCIPLES**

**A. THREE APPROACHES TO COPYRIGHT**

The preceding survey shows how the subject-matter of copyright is entwined with the kinds of rights that authors hold in different kinds of subject-matter. We now carry forward the search for underlying principles that Congress, or other decision makers, can bring to bear when they face proposals for protecting a new form of "writing" or for an expansion of rights in writings old or new.

One morally principled approach exalts authors. Authors—using the Constitution’s word to include writers, composers, artists, and many others—are the bearers and creators of our culture, both high and popular.\footnote{See 17 U.S.C. § 102(a) (1982).} Except for a fortunate and highly gifted few, they are not richly rewarded. Their works are easily appropriated by persons who need not compensate them. Further, these works are intellectual creations that bear the creative and personal stamp of their authors. According to this approach, the author should be able to decide when and how to publish his or her personal creation, both as a matter of respect and as a matter of allowing the author to win material rewards as best she can.\footnote{See, e.g., S. Stewart, \textit{supra} note 34, at 3-4.}

It is easy for proponents of this "exaltation of authorship" approach to slip into bathos about the lofty and lonely position of the author. It is as easy to slip into cynicism, and to observe that, the way the system is organized, those we idealize as lonely authors are often in fact the well-paid henchmen of monster multinational conglomerates that grind out—whatever the cynic despises. Less formidable entrepreneurs are currently obtaining copyrights on catalogs, dolls, and plastic flowers, not exactly the stuff of culture high or low.\footnote{See Note, \textit{Copyright Protection for Mass-Produced Commercial Products: A Review of Developments Following Mazer v. Stein}, 38 U. Chi. L. Rev. 807, 807 (1971).} Cynicism aside, there is probably a substantial consensus in support of Justice Reed’s concluding affirmation in \textit{Mazer v. Stein} that “[s]acrificial days devoted to . . . creative activities deserve re-

\footnote{See R. Brown & R. Denicola, \textit{supra} note 36, at 76-80 ("Note on Standards for Copyrights and Patents").}

\footnote{See 17 U.S.C. § 102(a) (1982).}

\footnote{See, e.g., S. Stewart, \textit{supra} note 34, at 3-4.}

wards commensurate with the services rendered." 58

Unfortunately, such vague rhetoric does little more than adorn the stage on which actual choices must be played out. A measurably more focused statement of the exaltation of authorship approach can be found in the views of the former Register of Copyrights, David Ladd. 59 Ladd takes strong issue with what he perceives to be the basic approach taken in *Sony Corp. of America v. Universal City Studios*, 60 that is, "allocat[ing] to the copyright owner only that portion [of compensation], however determined, which would avoid 'harm.'" 61 Believing that such determination is bound to be arbitrary, Ladd asserts "that the public is best served by regarding copyright as an instrument of property operating in a free market economy," 62 and he refuses to "enter into the debate about how much—either by exemptions, limitations, or compulsory licenses—this right and the value of this right should be compromised." 63

This is strong medicine, especially when a second dose is proffered. Ladd endorses the idea that when an author has created something and an entrepreneur has incurred the risk and expense in bringing the author's work to the public "there should be compensation for the use of that work based upon what the public is willing to pay. In other words, reasonable compensation for every use of the work just as with other property, whether it be car rental, lease, or admission to a theater." 64 Note that this bold position, doubtless acclaimed by copyright owners, seems to call for property rights in "every use" of a work, held in check only by market forces. In some cases, Ladd would accept "collective administration" necessitated by transaction costs, 65 for example, when many copyright owners ask some return from a multitude of users making home tapes.

For another example, consider again the Goetzl and Sutton

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61. Interview with former Register of Copyrights, David Ladd, 29 PAT. TRADEMARK & COPYRIGHT J. (BNA) 334, 337. All the quotations from Ladd in this paragraph and the next are taken from this forceful and wide-ranging interview.
62. *Id.* at 340.
63. *Id.*
64. *Id.* at 337.
65. *Id.* (collective administration by ASCAP, BMI, or the Copyright Royalty Tribunal is necessary).
proposal to provide an additional source of income for deserving artists by creating a display right that would survive the sale of a painting or sculpture.\footnote{66} The advantage of this scheme is that the fee would be paid by parties who do not now contribute to the painting's price, namely by galleries that want to display the work. This plan would therefore tap a group of free-riders, which is usually a good idea. But there would be costs. The transaction costs of administering such a scheme would, as its authors concede, be high.\footnote{67} Further, the number of exhibitions almost certainly would decline unless the justice of the artists' claim moves public authorities munificently to appropriate more funds for the galleries.\footnote{68} It is questionable whether active artists as a group would favor such a plan if they knew that it would decrease the opportunities for displaying their work.\footnote{69}

Similar objections can be raised to the Goetzl and Sutton proposal for a federal resale royalty.\footnote{70} A likely effect of such a proposal would be to depress initial sale prices.\footnote{71} Larger questions arise regarding the feasibility of calling upon the law to shift demand curves in the interest of artists who do not have the market power to get more for their work.\footnote{72}

Exaltation of authorship, whatever its emotional appeal, is not, in itself, enough to justify extending existing rights, even if

\footnote{66} See supra notes 48-51 and accompanying text.  
\footnote{67} See Goetzl & Sutton, supra note 28, at 36 n.78 (scheme is complex).  
\footnote{68} Cf. id. at 37 ("[I]mposing rights in public display would increase the burden on public institutions already faltering under financial strain . . . ").  
\footnote{69} Such a scheme might actually work to the benefit of the artists that need it least. Many struggling artists might waive their claim to display right, preferring to gain the exposure and forget the cash.  
\footnote{70} See supra text accompanying notes 49-52.  
\footnote{72} Goetzl and Sutton urge their prescriptions eloquently and make a strong case that conventional copyright does not offer much to artists whose works have a limited market in reproductions. But their desire to expand the display right collides with the absence of a market, that is of effective demand. Other authors, for example composers of popular music that is indeed popular, can extract payments from broadcasters and record makers because their works are in demand. Goetzl and Sutton conclude that "[a] private display right for the visual artist simply provides similar economic advantages where similar power is lacking." Goetzl & Sutton, supra note 28, at 55. But if this power is lacking, the law cannot create economic advantages for those whose works have no market. Public subsidies can, however, fill the gap. In the Netherlands, the government pays a salary to recognized professional artists, and consequently there are warehouses full of unsold works. Newman, Artists in Holland Survive by Selling to the Government, Wall St. J., Jan. 7, 1982, at 1, col. 4.
it is likely that creating a new property right will in fact shift resources in the authors' direction. That is the message of the second principled approach, which stems from the Supreme Court's interpretation of the Constitution's copyright clause.

The Supreme Court regularly intones that "[t]he copyright law . . . makes reward to the owner a secondary consideration."73 As recently as last year the Court restated its view of the purpose of the copyright law:

The monopoly privileges that Congress may authorize are neither unlimited nor primarily designed to provide a special private benefit. Rather, the limited grant is a means by which an important public purpose may be achieved. It is intended to motivate the creative activity of authors and inventors by the provision of a special reward, and to allow the public access to the products of their genius after the limited period of exclusive control has expired.74

The constitutional approach focuses on copyright as a way of promoting the general public good,75 an approach mandated by the copyright-patent clause76 itself. The copyright-patent clause is the only one of the enumerated powers of Congress that is prefaced by a statement of purpose: "to promote the Progress of Science and useful Arts."77 The clause does not say "to maximize the returns to authors and inventors." Concededly, Congress is not effectively constrained by the declaration of purpose.78 But when one considers the solemnity of the

75. See, e.g., Twentieth Century Music Corp. v. Aiken, 422 U.S. 151 (1975), where the Supreme Court wrote that:

The limited scope of the copyright holder's statutory monopoly, like the limited copyright duration required by the Constitution, reflects a balance of competing claims upon the public interest: 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. The immediate effect of our copyright law is to secure a fair return for an 'author's' creative labor. But the ultimate aim is by this incentive, to stimulate artistic creativity for the general public good. Id. at 156 (footnotes omitted).
77. Id.
78. See Hutchinson Tel. Co. v. Fronteer Directory Co., 770 F.2d 128, 130 (8th Cir. 1985) ("[P]urposes do not limit Congress's power to legislate in the field of copyright.") (footnote omitted). But cf. Graham v. John Deere Co., 383 U.S. 1, 5-6 (1966) ("The clause is both a grant of power and a limitation . . . in a patent system which by constitutional command must 'promote the Progress of . . . the useful Arts.' This is the standard expressed in the Constitution and it may not be ignored.") (emphasis in original). Even if the copyright clause were overstrained, Congress arguably would be able to invoke the commerce power to regulate copyrights. See 1 M. NIMMER, supra note 3, § 1.09, at 60.
clause, the Supreme Court's continuing concern for the public good, and the deeply rooted understanding that copyright flows from acts of Congress and not from natural right, one thing seems clear. When Congress legislates and courts fill in the blank spaces, both branches need ways to assess and balance the expected public good and private rewards.

Congress, more overtly than the courts, sometimes does no more than respond to pressure groups. Congress has created a number of exemptions from copyright liability, some of which have been studied, policy-based decisions while others have been decidedly less principled. A kind of copyright pork-barrel has existed, with exemptions from liability being granted to favored constituents. Thus, after having created a public performance right, Congress created a bundle of full and partial exemptions from liability in section 110, the public performance pork-barrel. This section exempts hymn singing at religious

79. Another principle that is inherent in the constitutional clause flows from the "for limited times" constraint. Professor David Lange expressed it well.

Copyright is an amalgam of property law principles bent to the service of a rather simple bargain. A limited term of protection against copying is granted to an author's original expression in exchange for the dedication of that expression to the public domain at the end of the term. The public ordinarily benefits at least twice from this bargain: once, when the original expression is first created, and then again when the expression is added to the public domain from which anyone may borrow freely to fashion new works. Although a copyright belongs to an author during its term, the ultimate purpose of this bargain is not to protect authors but rather to enrich the public domain. The cardinal principle in copyright law, then, is that any decision to extend the law or to recognize new interests ought to be based on a realistic expectation that one day the public domain will bear new fruit.

80. The conventional view that the judicial role is interstitial with respect to the creation and recognition of rights—as distinguished from their interpretation and application—is challenged by Professor Dan Rosen. See Rosen, A Common Law for the Ages of Intellectual Property, 38 U. MIAMI L. REV. 769 (1984). Rosen, a follower of Dean Guido Calabresi, see G. CALABRESI, A COMMON LAW FOR THE AGE OF STATUTES (1982), urges that the courts should avoid obsolescence in the law by "ongoing updating" of both decisional and statutory law. See Rosen, supra, at 828. As Rosen surveys the Supreme Court's copyright decisions, however, more often than not he finds them wanting. His own vigorous analysis of the cases seems to undermine his thesis.
services,\textsuperscript{81} band music at agricultural fairs,\textsuperscript{82} and dances held by organizations such as the American Legion or the Elks Club.\textsuperscript{83}

It would be digressive to explore fully the pork-barrel exemptions, most of which were created simply because the beneficiaries had a lot of votes, were respectable, and did not want to pay ASCAP.\textsuperscript{84} Such instances are regrettable but not disastrous. For other exemptions, a principled basis can be found. A kind of collective altruism supports the exemption of purely charitable performances where not even the musicians are paid.\textsuperscript{85} Educational interests, relying on the value of their calling, pressed hard in the revision process, both for copying privileges, where only minor concessions were made,\textsuperscript{86} and for performance exemptions, which are more substantial.\textsuperscript{87}

Congress can and does exempt purely private performances, such as singing in the shower.\textsuperscript{88} That only a \textit{public} per-

\begin{itemize}
  \item \textsuperscript{82} See 17 U.S.C. § 110(6) (1982).
  \item \textsuperscript{83} See 17 U.S.C. § 110(10) (added in 1982 by Pub. L. No. 97-366, § 3, 96 Stat. 1759). College fraternities and sororities tried to get into this exemption, but their parties are exempted only when they are “held solely to raise funds for a specific charitable purpose.” \textit{Id.}
  \item \textsuperscript{84} Occasional beneficiaries of pork-barrel exemptions are cut from a different pattern. For example, juke box operators are not always exemplary members of the community, yet they long enjoyed an “indefensible” exemption from the mechanical performance right. \textit{See Copyright Act of 1909, ch. 320, § 1, 35 Stat. 1075, 1088 (codified at 17 U.S.C. § 1(e) (1946))} (repealed 1976); 2 M. NIMMER, \textit{supra} note 3, § 8.17, at 8-174. The 1976 Act established a compulsory license, \textit{see} 17 U.S.C. § 116 (1982), but at a fee of only $8 a year for each machine. This fee was subsequently increased to $50 by the Copyright Royalty Tribunal. \textit{See R. BROWN \& R. DNICOLA, \textit{supra} note 35, at 414. This may all be better understood when one realizes that juke box operators are scattered throughout the country while song writers and publishers tend to be concentrated in a few metropolitan congressional districts. \textit{See id.} For a penetrating exposé of the coin-operated entertainment machine business, see \textit{Note, Section 116 of the 1976 Copyright Revision Act: Jukebox Operators and Copyright Owners Juke it Out Over Royalties, 3 Cardozo Arts \& Entertainment L.J. 343 (1984).}
  \item \textsuperscript{85} See 17 U.S.C. § 110(4) (1982).
  \item \textsuperscript{86} See 17 U.S.C. §§ 107, 504(c)(2)(i) (1982).
  \item \textsuperscript{87} See 17 U.S.C. § 110(1) (1982). Note, however, that under § 1(e) of the 1909 Act, only public performances of music \textit{for profit} were protected, so that essentially the 1976 Act maintained the status quo.
  \item \textsuperscript{88} \textit{See} Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 155 (1975).}

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formance right is given reflects respect for privacy and the impracticality of collecting fees for spontaneous song. There is indeed wide support for exempting forms of home activity that on their face constitute copying or performance. Photocopying and videotaping off-the-air are the conspicuous ones, though both are rationalized as fair use, not as an explicit exemption.

If this home use escape can be generalized to mean that all home copying is exempt, there arguably is a significant "no right" in the bundle of copyright ownership rights. This relative disadvantage suffered by owners of rights to easily copied material raises the question whether such authors should be able effectively to invoke equality of treatment.

Perceptions of inequality are especially acute with respect to a right, notably a performance right, that is rather fragmented in its application. While the performance rights of composers and movie makers, as we have just seen, are not unlimited, performers complain that they have none at all. They cannot collect royalties on the broadcast repetitions of their performances; all they get is their one-time share from the making and sale of the records.

The record makers and composers have broken the bonds of the first-sale doctrine and can now control leasing, supposedly for the sake of checking illicit copying. This spurs a claim for equality on the part of owners of copyright in works like videocassettes, who would like to maximize revenues from the leasing market—a rather different rationale.

Next, recall the Goetzl and Sutton argument that because composers can collect for successive public performances of their works, painters should be able to collect for successive public displays of their works. When they say that it is "doctrinally" wrong not to equalize the disparate treatment, one must ask whether the composer's right should indeed be viewed as the norm, or whether it represents an atypical reach of copyright to control the use of the copyrighted work, justi-

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89. In a recent article, Professor Stephen Carter boldly contends that a constitutional right of privacy bars any attempt to collect royalties for home taping. See Carter, supra note 23, at 311. He ventures onto even thinner ice by suggesting that the copier's privacy right would also forbid indirect payments, such as a tax on tape. Id. at 317. One would have thought that the indirect tax would avoid any actual invasion, though of course it would raise the price of home taping by consenting adults. Cf. Stanley v. Georgia, 394 U.S. 557, 564 (1969).

90. See Goetzl and Sutton, supra note 28, at 35.

91. Id.
fied by the inability of the composer—or dramatist—to earn sufficient rewards from the sale of copies. Basically, once the author has disposed of a copy of a work, our system prefers to let market forces rule the rewards that flow to property, but the market is hard to reach if there is a tollgate every few miles. Performance rights, as they are further extended, interpose too many toll collectors.

Invocation of the magic word “market” means that the time has come to examine the usefulness of the economic approach to copyright. Economists tell us that intellectual productions are a form of public good. That is, their quantity is not diminished by consumption. There is as much Hamlet today as there was when it was first created almost four hundred years ago. Furthermore, intellectual productions are not readily “appropriable” because they are so easily copied or performed. Therefore, they cannot be monopolized unless the state steps in and permits authors and publishers to exclude others from copying or performing. They will demand payment, and the need to pay means that a smaller quantity will be consumed. It diminishes consumer welfare to limit consumption of public goods. However, it may be necessary to accept higher prices and lower consumption in order to induce authors to write and publishers to publish. There are of course other inducements to write—or paint, or compose—such as prestige, prizes, and patronage. Our society, however, depends only in part on these three lures and so creates copyright. Even without subsidies or copyright, there are still inducements for publishers to publish. It is clear that they can and do make money by publishing Hamlet.

The hard part, even for an economist, is to decide just how much legitimation of exclusive rights in intellectual property is needed to induce the optimal flow of writings and of inventions. Not much has been written on this critical issue and what there is gives little immediate guidance. One is habitually referred to


94. Of course, publishers or producers may misjudge the level of demand, and disseminate “too much” Hamlet; but that is a normal risk of adjusting supply to demand.
two common-sense essays by Sir Arnold Plant, who among other distinctions had Professor Ronald Coase as a pupil. Plant shows considerable sympathy for the views of a Victorian worthy, Sir Louis Mallet, who, in dissent from a royal commission of 1876-78 on copyright expansion, declared that the first publisher of a book, by having a head start, can "secure ample remuneration both to the author and himself." His is a voice from an age that really believed in free markets, even to the point of being skeptical about the need for a patent system.

An accessible American counterpart to Plant is *The Economic Rationale of Copyright*, by Robert Hurt and Robert Schuchman. They do pay respectful attention to the philosophical arguments for protecting authorship. As for copyright's effect upon economic welfare, here, they sum up, "We enter an inconclusive area of speculation. However, we can say that the traditional assumption that copyrights enhance the general welfare is at least subject to attack on theoretical grounds; the subject certainly deserves more investigation and less self-righteous moral defense." Thus, the lessons from economics; they are not very helpful in hard cases.

Although lawyer-economists have been short on theory for copyright, they have been attentive to distinct, identifiable problems. Professor, now Judge, Stephen Breyer was the pioneer, in his 1970 attack on the need for copyright protection, especially in the textbook business. The decisions in *Wil-


96. Plant [1934], supra note 95, at 81.

97. A witness before that commission proposed doing away with copyright to alleviate the problem, as he saw it, that there were "too many books." *Id.* at 72.


100. *Id.* at 439.

101. An exceptional recent contribution by an economist that combines theory with empirical inquiry is Liebowitz, *Copying and Indirect Appropriability: Photocopying of Journals*, supra note 22, which argues that publishers can indirectly appropriate revenue from users by price discrimination against libraries.

102. See Breyer, *The Uneasy Case For Copyright: A Study in Copyright of
liams & Wilkins Co. v. United States\textsuperscript{103} and Sony Corp. of America v. Universal City Studios\textsuperscript{104} have proved to be fertile soil for legal-economic commentary on photocopying and home videotaping.\textsuperscript{105} In these and other areas where the pliability of the fair use concept has given almost free rein to judicial and academic manipulations, a few concepts drawn from economic analysis have entered the discussion.

The first is that of “market failure.” As Professor Wendy Gordon explains, market failure occurs when a “desired transfer of resource use is unlikely to take place spontaneously, or where special circumstances such as market flaws impair the market’s ordinary ability to serve as a measure of how resources should be allocated.”\textsuperscript{106} In such cases, she argues, fair use may permit copying or performance without compensation.\textsuperscript{107} Similarly, Congress may decide not to create or extend an exclusive right because of evidence—or intuition—that an efficient market for the right cannot be maintained and that an attempt to simulate an efficient market through a regulated compulsory licensing scheme would be unworkable as well. It may consequently do nothing. Congress may conversely decide, it will appear, that a particular market is successful without copyright protection for its product.\textsuperscript{108} Thus the terms “market failure” and “market success” describe different avenues to the

\textsuperscript{103} 487 F.2d 1345 (Ct. Cl. 1973) (medical library photocopying), aff’d by an equally divided Court, 420 U.S. 376 (1975).
\textsuperscript{105} For commentary on these decisions, see Cirace, supra note 23; Goldstein, The Private Consumption of Public Goods, 21 BULL. COPYRIGHT SOC’Y 204 (1974); Gordon, supra note 92; Perlman & Rhinelander, Williams & Wilkins Co. v. United States: Photocopying, Copyright, and the Judicial Process, 1975 SUP. CT. REv. 355; Raskind, supra note 23.
\textsuperscript{106} Gordon, supra note 92, at 1615. Professor Gordon advocates market failure as one of three criteria that the defendant in a copyright infringement action should have to establish to be able to claim the defense of fair use, the other criteria being that transfer of the use to the defendant in the particular case would be “socially desirable” and that an award of fair use to the defendant “would not cause substantial injury to the incentives of the plaintiff copyright owner.” Id. at 1614. For a general discussion of several factors that may lead to market failure, see id. at 1627-35.
\textsuperscript{107} See id. at 1627-45.
\textsuperscript{108} See infra notes 121-123 and accompanying text.
same outcome in that in each instance economic efficiency concerns suggest that an exclusive right not be extended.

Another economic concept that is sometimes relevant when discussing proposed changes in the copyright system is that of "externalities." An externality can be defined as a divergence between social and private cost that occurs "when some activity of party A imposes a cost or confers a benefit on party B for which party A is not charged or compensated by (or through) the price system." In a recent fair use study, Professor John Cirace addresses the argument that home videotaping of broadcast movies imposes losses on movie makers that should be internalized by the industries benefiting from the home taping process, namely the makers of the videotape recorders and blank tapes. After examining the economic arguments that favor imposing a tax on video recorders and blank

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[p]ollution is a common example [of an externality]. If a steel factory, A, pollutes the air and streams with byproducts of steel production, many B's suffer damage because of the reduction in air and water quality. It is often not feasible to compensate these individuals because of: (1) The transaction costs involved in dealing with large groups of persons, most of whom suffer small individual damage; (2) the problem of proving causation (e.g., which factory caused damage to which individuals); and (3) the problem of determining the extent to which individuals have suffered damage. The cost of damage, which is not considered in the market for steel, is said to be external to that market or an "externality."

Id. at 673 (footnotes omitted).

110. See Cirace, supra note 23, at 678-81. Cirace discusses the different approaches taken to externalities by Pigou and Coase, with Pigou advocating a system of taxes and subsidies to compensate for the externality and Coase proposing a market solution. Id. Compare A. PIGOU, supra note 109, at 192 (government intervention through a system of taxes and subsidies can eliminate divergence between private and social costs) with Coase, The Problem of Social Cost, 3 J. LAW & ECON. 1, 39-42 (1960) (tax and subsidy system results in misallocation of resources). Cirace generally adheres to Coase's views, and, when discussing the Betamax case, noted that

According to the theory of consumption externalities, the argument against eliminating the externality by placing a per unit tax on it, the proceeds of which would be paid to those suffering the externality, is that it may alter the allocation of resources from what would have been optimal before the tax (i.e., overstimulate the production of feature films and other audiovisual materials) and may overcompensate those suffering the externality. In the context of the plaintiffs' current opportunities for engaging in price discrimination, which probably both expands output and results in significant income redistribution effects in favor of the plaintiffs because of their ability to appropriate consumer surplus, the argument against such a per unit tax on home video records and blank tapes is further strengthened; one
tape and distributing the proceeds to the movie makers, Cirace, a follower of Ronald Coase, remains skeptical regarding the need for intervention. He further thinks that a tax to cure a Betamax-type consumption externality “may overcompensate [copyright owners] for the harm suffered and may overstimulate production of their works.”

Congress should be alert to the spillover into other sectors that may occur when it creates or shifts property rights just as it should be aware of the problems of fine tuning a tax intended to compensate copyright owners for external losses. Yet, though economics can sharpen analysis of a claim for protection, it does not provide a magic incantation. Thus, the economic approach to copyright eligibility, like the exaltation of authorship and the constitutional approaches discussed earlier, should be viewed as but one of several ways to approach a search for principled standards.

B. CONSTRAINTS SPECIAL TO COPYRIGHT

Whichever general approach or combination of approaches is taken, there are established limits to copyright eligibility in our system that must be heeded. The sweeping protection for “original works of authorship fixed in any tangible medium of expression” is constricted in two significant respects: the

should caution against even further stimulation of output and even greater compensation that would result from such a tax.
Cirace, supra note 23, at 680-81 (footnote omitted) (discussing Sony Corp. of Am. v. Universal City Studios, 464 U.S. 417 (1984)).

111. Cirace, supra note 23, at 681.
112. See supra notes 55-71 and accompanying text.
113. See supra notes 73-78 and accompanying text.
114. Judge, then Professor, Frank Easterbrook, in Foreword: The Court and the Economic System, 98 HARV. L. REV. 4 (1984), measures the work of the Supreme Court by its fidelity to an ex ante rather than ex post analysis of questions to be decided, especially in recognizing consequences at the margin—the effect on the consumption of other entertainment goods, for example, if the cost of home taping is increased. Also, in recognizing the public characteristics of information, at the same time he emphasizes the necessity to provide incentives to creators. He nevertheless admires the result reached in Sony Corp. of Am. v. Universal Cities Studios, 464 U.S. 417 (1984). Easterbrook observes that the Court “treated the dispute as a conflict between creation and use” and did not follow “the simplistic ex ante analysis of concluding that the creator of information is entitled to the highest possible value. It held that Congress may adjust the entitlements prospectively.” Easterbrook, supra, at 28. Economic concepts are also helpfully considered in Denicola, Institutional Publicity Rights: An Analysis of the Merchandising of Famous Trade Symbols, 62 N.C.L. REV. 603, 633-36 (1984).
separation of idea from copyrightable expression and the avoidance of protection for useful objects. The 1976 Act reiterates that copyright may not "extend to any idea, procedure, process, system, method of operation, concept, principle or discovery." The 1976 Act reiterates that copyright may not "extend to any idea, procedure, process, system, method of operation, concept, principle or discovery." This catalog of proscriptions, the 1976 House Report notes, was intended in part to prevent any extension of copyright in computer programs to the processes or methods embodied in the program. The broader purpose, the Report continued, was to "restate . . . that the basic dichotomy between expression and idea remains unchanged." This dichotomy explains the easy cases fairly well; for example, the idea that all persons are created equal cannot be copyrighted. The distinction between idea and expression begins to bite, however, when it bars things such as the process that a computer program effects. Such a process, if inventive enough, and if it includes physical or chemical activity, may be patentable; but patentable programs are scarce. It is thus not surprising that computerized processes would be pushed toward copyright because any time the arduous achievement of a short-lived patent can be turned into the painless acquisition of a seventy-five year copyright, a line will form to try it, and an academic cheering section can even be mustered.

When the process or system approaches pure copyright in that it is wholly verbal or pictorial, like the mysterious accounting system denied copyright protection in the bedrock decision of Baker v. Selden, criticism of copyright denial becomes more pointed. Perhaps because the rule in Baker v. Selden has

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118. Id.
119. See Diamond v. Diehr, 450 U.S. 175 (1981) (a 5-4 decision holding that a computer-controlled process for curing synthetic rubber was patentable). The Court there concluded:
when a claim containing a mathematical formula implements or applies that formula in a structure or process which, when considered as a whole, is performing a function which the patent laws were designed to protect (e.g., transforming or reducing an article to a different state or thing), then the claim satisfies the requirements of [35 U.S.C.] § 101.
120. See T. HARRIS, THE LEGAL GUIDE TO COMPUTER SOFTWARE PROTECTION 129 (1985); Samuelson, CONTU Revisited: The Case Against Copyright Protection for Computer Programs in Machine-Readable Form, 1984 DUKE L.J. 663, 756-60.
121. 101 U.S. 99 (1879).
been used to deny protection for things like business forms, where one might suppose that more was going on than the simple denial of protection to ideas, the line between expression and what is expressed is a bit smudged.

Still, the idea, system, and process proscription of section 102(b) is, I would argue, the most powerful category of ineligibility for copyright. Of course Congress could create property rights in purportedly new ways of managing a business, or running a school, or commanding an army that would be of great pecuniary value. Fortunately, however, potential value does not automatically give rise to new rights. The preservation of some public goods is staunchly viewed as in the public good. Justice Brandeis said it best: "The general rule of law is, that the noblest of human productions—knowledge, truths ascertained, conceptions, and ideas—become, after voluntary communication to others, free as the air to common use." In homelier terms, you can have copyright protection for your book about better ways to manage a business, but anyone who reads the book can freely use the ideas in it. This is the way things have been, and there is no reason to believe that the consequence has been a shortage of ideas about managing businesses. There may be a shortage of practical ideas or of able managers, but that is another matter. The idea, system, and process proscription in the Copyright Act is therefore principled and functional in that it leaves the "noblest of human productions" free and unregulated without decreasing the quality or quantity of those productions.

The treatment of designs of useful objects presents a much more confusing set of issues. While there is, I believe, a solid consensus within capitalist economies that copyright is inappropriate for ideas and methods, there is a lot of variation in the application of rules about copyright for industrial design. In

122. See, e.g., M.M. Business Forms Corp. v. Uarco, Inc., 472 F.2d 1137 (6th Cir. 1973). For criticism of the result in cases like M.M. Business Forms, see Gorman, Fact or Fancy? The Implications for Copyright, 29 J. COPYRIGHT SOC'Y. 560, 584 (1982); Olson, The Legal Protection of Printed Systems, 81 W. VA. L. REV. 45 (1979).

123. For a criticism of the rule of Baker v. Selden, see 1 M. NIMMER, supra note 3, § 2.18[C], at 2-200 to -201 (1985).


125. This is not to say that authors are rewarded only by royalties on their books. Persuasive and alert authors can gain remuneration through high-priced consultations and seminars.

126. See Reichman, Design Protection After the Copyright Act of 1976, 31 J.
the United States, the underlying policy is not much in doubt,\textsuperscript{127} though its application is not always easy.

At bottom, there does seem to be a preference for maintaining a clear distinction between "easy" copyright and "hard" patent. We do have an ornamental design patent system in which eligibility is measured by the strict standards of patent plus an additional requirement of ornamentality.\textsuperscript{128} The design patent system is spotted with attempts to pass off something that does not qualify for a mechanical patent as an ornamental design.\textsuperscript{129}

The courts are equally vigilant not to allow unfair competition and copyright to become havens for failed mechanical and design patent applications. This watchful position can be explored by examining leading cases that involved lighting fixture design. In the companion cases of \textit{Sears, Roebuck \& Co. v. Stiffel Co.},\textsuperscript{130} and \textit{Compco Corp. v. Day-Brite Lighting, Inc.},\textsuperscript{131} Stiffel and Day-Brite attempted, unsuccessfully, to validate mechanical or design patents for their respective pole lamps and fluorescent "egg-crate" creations.\textsuperscript{132} Thwarted in their infringement claims, they sought injunctive relief under state un-
fair competition laws. The Supreme Court ultimately rejected their claims on preemption grounds, with Justice Black reasoning in *Sears* that "[j]ust as a State cannot encroach upon the federal patent laws directly, it cannot, under some other law, such as that forbidding unfair competition, give protection of a kind that clashes with the objectives of the federal patent laws."\(^{133}\) Later, in the 1978 case of *Esquire, Inc. v. Ringer*,\(^{134}\) the D.C. Circuit upheld the Register of Copyrights's refusal to copyright a trim modern design for a lighting fixture because applicable Copyright Office regulations precluded registration of the design of a utilitarian article "when all of the design elements . . . are directly related to the useful functions of the article."\(^{135}\) This decision was criticized, chiefly because the controlling regulation was thought to be hostile to the modern design principle that form should follow function.\(^{136}\)

The *Sears*, *Compco*, and *Esquire* decisions exemplify the necessity of maintaining boundaries if copyright—and patent—are to fulfill their purposes. These boundaries—between copyright and patent, between expression and utilitarian function, and, more fundamentally, between protection and nonprotection—stand for several policy concerns. The patent/copyright boundary reflects the distinction in purpose between encouraging technological innovation and stimulating creative expression. Similarly, the boundary between ornamental design and useful object reflects the policy determination that a seventy-five year monopoly on a useful object would frustrate the policy that seventeen years is long enough for patent protection. The fundamental boundary between protection and nonprotection exists because protection is hostile to competition. As a general rule, competition makes markets efficient. If, however, it appears that a wholly competitive regime discourages investment in new models and designs, the system creates limited monopolies of one kind or another to encourage investment in innovation. This is the constitutional approach at work: the protection granted by copyright should be no more extensive than necessary to stimulate the degree of creativity desired. To

\(^{133}\) *Sears*, 376 U.S. at 231.

\(^{134}\) 591 F.2d 796, 798 (D.C. Cir. 1978), cert. denied, 440 U.S. 908 (1979).

\(^{135}\) Joint Appendix at 28, *Esquire*, quoted in *Esquire*, 591 F.2d at 798; see 37 C.F.R. § 202.10(c) (1976) (revoked 43 FED. REG. 966 (1978)).

\(^{136}\) See Denicola, *Applied Art and Industrial Design: A Suggested Approach to Copyright in Useful Articles*, 67 MINN. L. REV. 707, 737-38 (1983) ("The only justification for the whimsical approach espoused in *Esquire* is the desire for a levee to hold back the flood.").
determine that degree of creativity is no easy task. It requires a legislative judgment informed by empirical inquiry. Two examples from the wide world of useful article design show that little hard data can be brought to bear.

Before 1954, it seemed clear that neither fabric designs nor apparel designs could qualify for copyright. In that year, however, Mazer v. Stein opened the door for protection of fabric designs as works of art, but the Copyright Office regulations following Mazer, now part of the statute, left apparel design unprotected. The design of a dress, it is thought, cannot be separated from the useful function of the dress to cover or uncover the wearer.

We have now had thirty years of fabric design protection. We have not had any before-and-after studies, at least none presented in a public forum, to tell us whether the industry is healthier and more creative. The contrasting effects on dress designers' creativity of the lack of copyright protection for apparel designs are similarly unknown. Dress designers have been seeking design protection for most of the century, all in vain. Yet they struggle on, plagued by instant knock-offs of their successes by price-cutting competitors. Lower prices benefit the consumer, whose range of choice is constrained only by the decrees of fashion, not by those of courts enforcing copyright.

Another example of a useful article denied copyright protection brings this discussion back to chip masks. Designers of printers' typefaces attempted to bring them into copyright during the revision process that led to the 1976 Copyright Act. Although typefaces were, and are, eligible for design patent, they can nowadays be both created and copied so easily by com-

140. See B. Ringer, Bibliography on Design Protection (Copyright Office 1955); Nimetz, Design Protection, 15 Copyright L. Symp. (ASCAP) 79 (1967).
141. In England, dress designs are protectable, as are the designs of many other useful objects, including automobile replacement parts. See Cornish, Protecting the Appearance of Products: A British Experiment, in Congress of the Aegean Sea 297 (Association Littéraire et Artistique Internationale, 1983); cf. Lester, Recent Developments in the Copyright Sphere in the United Kingdom, 30 J. Copyright Soc'y 530, 541-42 (1983). Comparative studies on the economic effects of these measures would be most welcome.
puterized photographic processes that the industry sought the “easier” protection of copyright.\textsuperscript{143} The House Committee, however, refused to act. As one committee member put it:

I don’t see any reason why the letter A can’t be a work of art and permit some ingenuity in its design, but the difference is that we communicate ideas through letters and that the whole theory of the Constitutional protection is to enhance communication of those ideas, and I just am a little skittish about giving somebody a lock upon the vehicle through which the ideas are communicated.\textsuperscript{144}

So also, computer chips are “vehicle[s] through which . . . ideas are communicated.”\textsuperscript{145} Nonetheless, by enacting the Semiconductor Chip Protection Act of 1984,\textsuperscript{146} Congress did provide chip masks with copyright-like protection.\textsuperscript{147} One can suggest three main reasons why chip designers were successful where typeface designers were not. First, the semiconductor chip industry is a large one, able to exert a great deal of pressure on Congress. Second, its advocates made a convincing demonstration of probable injury to this industry, with the added hook that the Japanese would be inflicting it. Finally, the timely shift to the \textit{sui generis} statute with its limited protection mollified grave concerns. To use the whole sweep of copyright to protect these purely utilitarian objects would have done violence to copyright principles.

This final reason assumes that “copyright principles” indeed exist, even if they do not lead directly to firm rules of legislation or decision. Ready solutions do not emerge because each claim for copyright protection has to be examined in a rich context, now to be restated in conclusion.

\textbf{CONCLUSION}

The most important element in the search for principled standards of copyright eligibility is the copyright-patent clause


\textsuperscript{144} \textit{Id.} at 1036 (statement of Rep. Wiggins). The 1978 case of Eltra Corp. v. Ringer, 579 F.2d 294 (4th Cir. 1978), upheld the Register of Copyrights’s position that typeface designs are not copyrightable.


\textsuperscript{147} See supra note 2 and accompanying text.
of the Constitution. This clause admonishes that the purpose of copyright is to promote the progress of knowledge. The Supreme Court has repeatedly emphasized its understanding of the policy that flows from the Constitution: the primary public interest lies in increasing and spreading knowledge, not in rewards to authors and publishers.

This position, which reasonably can be called the constitutional approach, stands between two others. One, stemming from the exaltation of authorship, and most developed in European droit d’auteur theory with its lofty structure of moral right, goes hard after material rights, too. It favors enlarging the panoply of property, and letting authors and publishers get everything they can from it. The other approach, that of mainline economics, also admires authorship and creativity—but as public goods which should not be constrained by ownership, except where a right to seek a reward is a necessary stimulus to authorship. Economics casts a cold eye on property rights in intellectual property; economists realize that copyright is a monopoly device that raises prices and reduces consumption, but they concede that such rights, when well delineated, may make some markets more effective.

The law maker can profit from both these positions, opposed though they are. Droit d’auteur theory gives authors an advantage. They need one because they are so often confronted by giant users with more monopoly power than the copyright system gives the author. On the other hand, the rhetoric of rights can be cooled off by the cold bath of economic analysis. Especially valuable is the economist’s skill in pursuing the hidden implications of a shift of resources.

The legislature and the courts have already created in copyright an elaborate bundle of rights and of limitations on those rights. Caution is called for in altering or extending these rights. When major technological changes like photocopying or videotaping occur, immediate adjustments may not be necessary. Sometimes new technology opens up new markets. It is not automatic that authors should immediately appropriate those markets, because authors did not take the risk of developing the new technology. As Judge Hough noted years ago in the context of claims to movie rights, authors may be trying to appropriate “an unearned increment conferred . . . by the ingenuity of many inventors and mechanicians.”

On the other hand, unharnessed new technologies may destroy old markets, as movies did most of live theater. Dramatists, for example, until they got rights in movies made from their works, may have had less incentive to create plays. In our time, movie makers may be threatened by their own enterprise in releasing their works on videotapes. The mere existence of such a threat does not necessarily mean that movie makers should be given new rights to control the use of works they have sold.

Before the system responds to sometimes frenetic claims for new rights there are counsels for equality of treatment that should be heeded. Equality, however, obtains among those who are recognizable as equals. There are vast differences in the types of authorship gathered into copyright, as well as in marketing strategies, new technologies, and public demand for differing modes of expression. Equality is not only hard to measure, but it also may not be totally desirable.

Of equal importance is the desirability of maintaining internal consistency in copyright. As Dean L. Ray Patterson observed, in testimony calling for the *sui generis* approach to the chip mask amendments, "[w]hile consistency for its own sake is a virtue of small consequence, consistent principles for a body of law are essential for integrity in the interpretation and administration of that law."149

To retain this essential internal consistency, copyright must remain a body of law with fairly definite limits. Copyright has expanded to accommodate any number of changes in the ways that human communications are created and transmitted. It is a successful way of recognizing rights in expressive people, freeing them from dependence on the bounty of a feared ruler or a capricious patron. Congress has limited authors' rights, however, so that the use to which readers put writings is not tyrannized. It is significant that the most comprehensive limit on copyright is called fair use. In another direction, exclusive rights are limited so as to leave free the ideas and systems that a copyrighted work discloses. They are in the public domain.

In still another direction, our law tries to keep copyright

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clear of the world of industry and useful articles. Copyright, made easy in order to provide a capacious shelter for works of enlightenment and diversion, can be too easily bent to evade the limits on the system of industrial patents or extend monopolies that have no support in any system.

The Semiconductor Chip Protection Act of 1984 is, as Patterson has aptly labelled it, a venture into "industrial copyright." As such, it has constraints, such as short duration, that distinguish it from copyright. This *sui generis* experiment would arouse discomfort if it were the progenitor of a clutter of little one-of-a-kinds. On the other hand, it may become a model for a benign Third World between copyright and patent—a result that would provide an appropriate degree of protection without sacrificing the doctrinal consistency that is indispensable to a principled approach to these areas.151

150. *Id.* at 52.

151. President Reagan has recently indicated that he believes federal copyright law should be amended to better protect "‘firmware,’ hardwired logic, software that interacts intimately with hardware." *See* *Administration Statement on International Trade Policy, 2 Copyright L. Rep.* (CCH) ¶ 20,327 (Sept. 23, 1985). "Firmware" does not fit in copyright. Its protection may well seek the *sui generis* mode.