1989

Design Protection and the New Technologies: The United States Experience in a Transnational Perspective

J. H. Reichman
Vanderbilt University School of Law

Follow this and additional works at: http://scholarworks.law.ubalt.edu/ublr
Part of the Intellectual Property Law Commons

Recommended Citation
Available at: http://scholarworks.law.ubalt.edu/ublr/vol19/iss1/3

This Article is brought to you for free and open access by ScholarWorks@University of Baltimore School of Law. It has been accepted for inclusion in University of Baltimore Law Review by an authorized administrator of ScholarWorks@University of Baltimore School of Law. For more information, please contact snolan@ubalt.edu.
# DESIGN PROTECTION AND THE NEW TECHNOLOGIES: THE UNITED STATES EXPERIENCE IN A TRANSNATIONAL PERSPECTIVE

J.H. Reichman†

Table of Contents

I. INTRODUCTION AND SCOPE OF THE STUDY ................. 8
   A. Contrasting Destinies of Industrial Art and Industrial Literature ... 8
   B. Noncumulation Without a Design Law .......................... 12
      2. Current Trends and the Quest for a Universal Solution ....... 17

II. MORPHOLOGY OF UNITED STATES DESIGN PROTECTION LAW IN THE 1980s ... 19
   A. A New Court Revives an Old Design Law ...................... 19
      1. Three Decades of Suspended Animation: 1952-1982 ......... 20
         a. Novelty and Nonobviousness Compared .................. 20
         b. Nonobviousness Means What It Says .................... 26
      2. Transitional Holding Patterns: 1982-1986 .................. 30
         a. The Emerging Role of Secondary Considerations ....... 31
         b. Evenhanded Tests of Nonobviousness .................... 34
         c. Uncertain Standard of Functionality .................... 37
         d. Infringement—The New Outcard ......................... 42
      3. The New Synthesis: Functionality, Point of Novelty, Illicit Appropriation ............................... 45
         a. Unreserved Application of Secondary Factors .......... 46
         b. Nonfunctionality as a "Multiplicity of Forms" ....... 47
         c. Relation Between Functionality and Infringement ...... 51
   B. Copyright Protection of Applied Art: The Retreat from Partial Cumulation ......................... 56
      1. Forty Years After Mazer v. Stein: 1954-1983 ............. 56
         a. Separability Is Sometimes Conceptual ................. 58

† B.A., 1955, University of Chicago, J.D., 1979, Yale Law School. Professor of Law, Vanderbilt University School of Law.

Earlier versions of this Article were presented to the International Conference on the Legal Protection of Industrial Design [Disegno Industriale e Protezione Europea], held at Treviso, Italy, October 11-13, 1988, and to the National Conference on Industrial Design Law and Practice, held at the University of Baltimore School of Law, Baltimore, Maryland, March 10-11, 1989. The author is grateful to Dr. Franco Benussi and to Professor William Fryer for these opportunities to air the findings that are more fully developed here, and also to Professors Marty Adelman, Paul Geller, Paul Goldstein, and Pamela Samuelson for their helpful advice and encouragement. The research for this Article is a by-product of a larger project financed in part by the German Marshall Fund of the United States and in part by grants from the Kapor Family Foundation and the Dean of the Vanderbilt Law School, John J. Costonis. Research assistance was provided by Cathy Berryman, Lynn Hinrichs, Christina Nargolwalla, Kendrick Royer, and other students in the intellectual property program at Vanderbilt Law School. The author gratefully acknowledges the generosity of his grantors and the unflagging support of his assistants.

(1) Established Categories of Applied Art .................. 59
(2) Partial Cumulation in the Second Circuit ............. 61
b. Conceptual Separability Reconsidered .................. 65
2. Demise of the Neo-German Model? ....................... 69
   a. Judicial Aversion to Noncumulation ................. 69
   b. Healing a Split in the Circuits .................... 72
3. Critical Evaluation of Current Law ..................... 75
C. Concurrent Protection of Trade Dress: The Judge-Made
   Design Law .............................................. 81
   1. “Appearance Trade Dress” Without Aesthetic
      Functionality: 1975-1985 ........................... 81
         a. Product Configurations as Pseudo Trade Dress . 86
         b. A Revisionist View of Utilitarian Functionality . 90
         c. Eclipse of the Aesthetic Functionality Doctrine ... 95
   2. The Most Protectionist Design Law of Them All ......... 98
      a. Functionality and the Multiplicity of Forms Revisited . 100
      b. Secondary Considerations Without Nonobviousness .... 105
      c. Misappropriation and Its Countervailing Tendencies .. 111
   III. PREMISES FOR INTERNATIONAL REGULATION OF A
        DISRUPTIVE LEGAL HYBRID ......................... 123
   A. Cyclical Nature of the Design Phenomenon in all Legal
      Environments ........................................ 123
   1. Pendular Swings in Domestic Law ........................ 123
   2. Under- and Overprotection in Foreign Law .......... 126
      a. Excesses of the Copyright Approach .............. 127
      b. The Two-Market Conundrum ........................ 130
      c. Failings of the Modified Patent Approach ....... 133
   B. From Industrial Design to the New Technologies ...... 136
   1. Incremental Innovation Bearing Know-How on Its Face .. 136
   2. Industrial Design as the Oldest Marginal Case ...... 138
   3. Logic of a Modified Copyright Approach ............. 141
      a. Why Know-How Seeks the Copyright Modality .... 141
      b. Measured Exploitation of a Possibly Fatal Attraction . 144
         (1) Tenets of a Tailor-Made Regime .............. 145
         (2) Empirical Models in Search of a Consensus ..... 147
I. INTRODUCTION AND SCOPE OF THE STUDY

A. Contrasting Destinies of Industrial Art and Industrial Literature

Because industrial design partakes of both art and industry, it sits astride the Berne and Paris Conventions,1 which otherwise purport to subdivide the world’s intellectual property system into mutually exclusive spheres dominated by the copyright and patent paradigms.2 Empirically, ornamental designs of useful articles (or “appearance designs” as they are called today) seldom behave like the subject matters that either of these paradigms typically governs. Viewed as industrial property, appearance designs seek protection under design patent laws3 or sui generis design laws that traditionally operate on modified patent principles.4 In practice, relatively few


2. Compare Berne Convention, supra note 1, art. 1 (constituting “a Union for the protection of the rights of authors in their literary and artistic works”) with Paris Convention, supra note 1, art. 1 (1) (constituting “a Union for the protection of industrial property”) and id. art. 1 (2) (defining object of protection as “patents, utility models, industrial designs, trademarks . . . . and the repression of unfair competition”).


designs meet the formal and substantive prerequisites these laws normally impose. Viewed as works of applied art, appearance designs seeking copyright protection become embodied in mass-produced useful articles of every kind. With the notable exception of France, courts and legislators in most industrialized countries limit copyright protection of three-dimensional appearance designs in order to defend the capacity of their industrial property systems to mediate between innovation and competition on the general products market. Trapped between the patent and copyright para-

5. See infra text accompanying notes 319-31, 813-17, 845-58, 889-95.


7. France allows all ornamental and some functional designs of useful articles to claim concurrent protection in copyright law whether or not eligible for protection under its sui generis design law. See, e.g., Gaubiac, La théorie de l'unité de l'art, 111 R.I.D.A. 2 (1982) (describing and criticizing French regime of total cumulation under the "unity of art" doctrine); Desbois, Le système francisc: La théorie de l'unité de l'art, reprinted in Les Perspectives D'Un Droit Communautaire En Matière De Dessins Et Modeles Industriels 74 (Centre Universitaire d'Enseignement et de Recherche de Propriété Industrielle (CUERPI) ed. 1977) [hereinafter Les Perspectives]; see also infra text accompanying notes 813-47.

digms, yet ill-served by both, industrial design constitutes a legal hybrid whose cyclical path through history still destabilizes the world's intellectual property system despite some two hundred years of regulatory action. Although the United States has never enacted a sui generis design protection law like those adopted abroad and did not recognize works of applied art until 1954, its intellectual property system registers the same disruptive tendencies attributable to the design phenomenon that other industrialized countries have long experienced. Historically opposed to copyright protection of industrial art under the French "unity of art" doctrine, this country's intellectual property authorities struggled to exclude commercial designs from the Copyright Act of 1909 while petitioning Congress to enact an innovative design protection law built on modified copyright principles. Between 1955 and 1976, the United States thus seemed


9. For the anomalous application of both the Berne and Paris Conventions, supra note 1, to the same matter with different legal results contingent upon artificial distinctions between "applied art" and "industrial design," see generally, Pérot-Morel, Les contraintes conventionelles, in Les Dessins Et Modeles En Question, supra note 8, at 117-46.


11. See infra text accompanying notes 781-865.

12. The first legislation on designs was reportedly a British Act of 1787 "for the encouragement of the arts of designing and printing linens, cottons, calicoes and muslins." 2 S. Ladas, supra note 1, at 829. Although this act appears to follow the principles of artistic property law, the French design law of 1806, which made designs a branch of industrial property law, was the model followed by the rest of the world.

13. See infra note 22 and accompanying text.


15. Compare infra text accompanying notes 782-810 (pendular swings in domestic law) with infra text accompanying notes 811-65 (over- and underprotection in foreign law).

16. See, e.g., 2 S. Ladas, supra note 1, at 836 (noting British and American opposition to French "unity of art" doctrine at Hague Conference of 1925); Fisher, The Operations of the Copyright Office (address before the meeting of the ABA Section of Patent, Trademark and Copyright Law, Aug. 30, 1960) [hereinafter Fisher Address], reprinted in Proceedings of the ABA-Section of Patent, Trademark & Copyright Law 202, 207-08 (1960) (stressing dangers of applying copyright law to commercial designs). For the "unity of art" doctrine, see supra note 7; infra note 43 and accompanying text.

committed to a noncumulationist solution that would have combined the criterion of "separability" familiar from Italian copyright law with an American regime of special design protection that aimed to be a model to the world.  

When, in 1976, Congress passed the General Revision of Copyright Law after some two decades of lacerating deliberations, the accumulated tensions surrounding the treatment of borderline utilitarian works issued in two contradictory sets of provisions. At one extreme, Congress appeared to reject a "unity of art" heresy brewing in the federal district courts by codifying the criterion of separability as the sole basis for distinguishing copyrightable works of applied art from noncopyrightable industrial designs. The new definitions of "pictorial, graphic and sculptural works" and of "useful articles" set out in section 101 effectively denied copyright protection to most three-dimensional, modern designs of useful articles. The proposed sui generis design bill, however, still pending in early 1976 as Title II of the General Revision Bill, was deleted at the last minute by the vote of a closely divided House Subcommittee, and that bill was never restored to the Final Act signed into law on October 19, 1976.

---

18. See Fabiani, La protezione dell'arte applicata e dell'industrial design in Italia e negli USA, 57 IL DIRETTO DI AUTORE 414 (1986) [hereinafter Fabiani, La Protezione dell'arte applicata]; Reichman, Designs Before 1976, supra note 17, at 1181-1200, 1213-23 (citing authorities); see also infra notes 74, 341-42, 920-34 and accompanying text.


21. 17 U.S.C. § 101 (1988). The new definitions read as follows: "Pictorial, graphic, and sculptural works" include two-dimensional and three-dimensional works of fine, graphic, and applied art, photographs, prints and art reproductions, maps, globes, charts, technical drawings, diagrams, and models. Such works shall include works of artistic craftsmanship insofar as their form but not their mechanical or utilitarian aspects are concerned; the design of a useful article, as defined in this section, shall be considered a pictorial, graphic, or sculptural work only if and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.

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. An article that is normally a part of a useful article is considered a "useful article."

Id. (emphasis added); see also H.R. REP. No. 1476, 94th Cong., 2d Sess. 54 (1976), reprinted in 1976 U.S. CODE CONG. & ADMIN. NEWS 5659-801 (stressing effort to clarify "the distinction between works of applied art protectable under the bill and industrial designs not subject to copyright protection") (emphasis added); infra text accompanying notes 343-475.

22. See Reichman, Designs Before 1976, supra note 17, at 1261-64.
At the other extreme, Congress proceeded to codify language, pending since 1964 in the very same section of the Copyright Act, which in effect instituted a "unity of literature" approach to computer programs. In so doing, Congress declined to treat computer programs as "useful articles," and it did not carry over to industrial literature any of the doctrinal limitations it had just imposed on applied art, including the highly exclusionary criterion of separability. When Congress further enacted the Software Protection Act of 1980, it confirmed the liberal dispositions concerning the copyrightability of industrial literature as codified in 1976, without any clarification of the restrictive and altogether contradictory dispositions concerning industrial art that were adopted—without a special design law—in the General Revision of 1976.

B. Noncumulation Without a Design Law

The provisions codified in 1976 shunted most three-dimensional designs of useful articles to the Design Patent Act of 1842. But few com-
commercial designers could satisfy the high standards of patentability under the best of circumstances, while judicial hostility to this institution had rendered even issued design patents so vulnerable to invalidation in the past that some authorities deemed them hardly worth the cost and effort to obtain. As regards unfair competition, moreover, the United States Supreme Court, in the Sears-Compco decisions of 1964, had ruled that neither state nor federal laws appealing to the misappropriation rationale could protect unpatented, noncopyrightable industrial designs against slavish imitation as such. 

The Copyright Act of 1976 thus appeared to consign the bulk of the commercially most valuable appearance designs to the public domain, notwithstanding this country's obligation to protect industrial designs under article 5 quinquies of the Paris Convention. This result satisfied those who opposed sui generis legislation on the grounds that no need for it had been established. It contrasts with the view prevailing abroad, which assigns design protection an important role in world trade, and it ignored the past tendencies of foreign courts to expand...
copyright and unfair competition laws in order to compensate for a lack of sui
generis design protection.\textsuperscript{36} If, in short, Congress intended to maintain
healthy competition in the design industries, it had neglected to indicate just
how the United States could accomplish this result without an operative
design law when the other industrialized countries had failed.\textsuperscript{37}


That the federal appellate courts in this country were no more disposed
to tolerate systematic design piracy than their foreign counterparts became
increasingly evident in the period between 1978, when the new copyright
law took effect,\textsuperscript{38} and 1982, when a specialized appellate tribunal began to
hear patent appeals.\textsuperscript{39} In this period, for example, the Court of Appeals for
the Second Circuit attempted to expand the protection of appearance
designs as copyrightable works of applied art by magnifying the ambigu­
ties inherent in the separability criterion codified in 1976.\textsuperscript{40} Some
federal appellate courts, including the Second Circuit, also began to treat product
and container configurations as unregistered trademarks protectable within
the federal unfair competition law developing around section 43(a) of the
Lanham Act.\textsuperscript{41}

As these early trends gathered momentum, comparative analysis
revealed striking affinities between the different responses to the design
problem emerging in domestic law and the conflicting approaches to the
same problem that have long prevented the Berne Union countries from
reaching a consensus concerning applied art and industrial designs.\textsuperscript{42} Three orthodox positions are still recognized in foreign and international law. At one extreme, partisans of the "unity of art" doctrine codified in France advocate full and cumulative copyright protection for all industrial art, regardless of any protection otherwise available from sui generis design laws operating under the aegis of the Paris Convention for the Protection of Industrial Property.\textsuperscript{43} At the opposite extreme, partisans of noncumulation as codified in Italy oppose copyright protection of industrial designs and look to sui generis design laws governed by the Paris Convention.\textsuperscript{44} Partisans of a third position, which the High Court of Germany has implemented since the turn of the century, prefer a regime of partial cumulation to either of these extremes. This school allows full copyright protection to a few exceptional designs of useful articles under a case-by-case test of artistic achievement while relegating most commercial designs to a sui generis regime.\textsuperscript{45} Although individual member states sometimes change their affiliations, the Berne Union countries as a whole remain divided into irreconcilable camps along these lines.\textsuperscript{46}

\textsuperscript{42} For the lack of consensus among the Berne Union countries as reflected in the Berne Convention, supra note 1, art. 2(7), see generally S. Ricketson, supra note 1, at 267-69, 280-82. The Berne Convention, supra note 1, as revised at Brussels in 1948, obligated member countries to recognize some works of applied art, but it left the member countries free to determine the line of demarcation between copyrightable works of applied art and noncopyrightable industrial designs that remained subject to domestic design laws and, later, to article 5 quinquies of the Paris Convention, supra note 1. See, e.g., S. Ricketson, supra note 1, at 276-79 (discussing articles 2(1), 2(5) of the 1948 text of the Berne Convention); see also Geller, International Copyright: An Introduction § 4 [I][c][i], in 1 INTERNATIONAL COPYRIGHT LAW AND PRACTICE (P. Geller ed. 1990) [hereinafter INTERNATIONAL COPYRIGHT LAW]. These provisions, with their discordant application of reciprocity, were carried over to article 2(7) of the present Berne text. However, the duration of protection for works of applied art was extended to a minimum of twenty-five years in article 7(4), and the notion of reciprocity as regards works "protected in the country of origin solely as designs and models" was refined to ensure that, in countries where no design law existed, copyright protection must be afforded. See Berne Convention, supra note 1, arts. 2(1), 2(7), 7(4); S. Ricketson, supra note 1, at 279-80.

\textsuperscript{43} See supra note 7 (citing Gaubiac and Desbois); Reichman, Designs Before 1976, supra note 17, at 1153-59 (discussing unity of art doctrine in France).

\textsuperscript{44} See Reichman, Designs Before 1976, supra note 17, at 1182-86 (dissociation theory in Italy); id. at 1213-23 (criterion of separability in Italian law); infra text accompanying notes 374-80.

\textsuperscript{45} See, e.g., Reimer, The Relations Between Copyright Protection and the Protection of Designs and Models in German Law, 98 R.I.D.A. 38 (1978); infra notes 393, 401-03 and accompanying text (citing other authorities).

\textsuperscript{46} The situation today is thus no clearer than it was in 1948. See Pérot-Morel, Les enseignements, supra note 8; Cohen Jehoram, Comparative Study, supra note 8; Duchemin, General Report, supra note 8, at 58-62; see also S. Ricketson, supra note 1, at 281-82 (summarizing "three broad national approaches to the protection of works of applied art in Berne Union countries"); EC Green Paper, supra note 35, at 16 (deferring legislative initiatives concerning designs and models until "the time is ripe" and stressing that "[a]lter present . . . it would be unrealistic to think that such legislative proposals could be launched with a reasonable chance of success"). The positions of France, the Federal Republic of Germany, and Italy remain essentially unchanged. The Nordic countries and Switzerland reportedly follow a regime of partial cumulation
After 1976, United States courts and administrators increasingly succumbed to the same divisive tendencies that had long plagued the Berne Union. For example, the United States Courts of Appeals for the Eleventh and District of Columbia Circuits appeared to align themselves with the neo-Italian regime of noncumulation that the Copyright Office had formally endorsed since 1958. In contrast, the United States Court of Appeals for the Second Circuit pursued a regime of partial cumulation closely resembling that of the Federal Republic of Germany. Those federal appellate courts that began to apply section 43(a) of the Lanham Act displayed the same protectionist bias that had induced Netherlands courts to shelter industrial designs in unfair competition law until the Uniform Benelux Designs Act took effect in 1975. Meanwhile, individual judges on all more or less along the lines of the Federal Republic. Spain also appears to follow a regime of partial cumulation like that of the Federal Republic, as does Austria. See Lastres, Reflexiones sobre la figura del modelo industrial en el derecho Español, in DISEGNO INDUSTRIALE E PROTEZIONE EUROPEA, supra note 8, at 119, 123-24; Walter, The Legal Protection of Industrial Design in Austria, in DISEGNO INDUSTRIALE E PROTEZIONE EUROPEA, supra note 8, at 101-05. The Benelux countries formally adhered to a similar regime in 1975, but courts have continued to expand cumulative protection of industrial designs in copyright law, especially in the Netherlands. See Cohen Jehoram, Netherlands § 2[4][c], in INTERNATIONAL COPYRIGHT LAW, supra note 42; Braun, Les systèmes de cumul partiel de protection par les lois spécifiques et par le droit d’auteur, in LA PROTECTION DES CREATIONS D’ESTHETIQUE INDUSTRIELLE DANS LE CADRE DE LA C.E.E.—OBJECTIF 1992, at 97-106 (C.U.E.R.P.I. & A.D.E.R.P.I. eds. 1988) [hereinafter OBJECTIF 1992] (proceedings of the international conference held at Chateau de Sassenage, France, June 17, 1988).

The United Kingdom allowed cumulative protection in copyright law after 1968 (while admitting some purely functional designs to full copyright protection in the same period). But the Copyright, Designs and Patents Act, 1988, ch. 48, §§ 213-64, may have eliminated cumulative protection for all commercially exploited industrial designs in conjunction with the enactment of an unregistered design right. See generally Fellner, The New United Kingdom Industrial Design Law, 19 U. Balt. L. Rev. 369 (1989) [hereinafter Fellner, New U.K. Law]. For the implications of this development, see infra text accompanying notes 938-63.

47. See Norris Indus., Inc. v. ITT, 696 F.2d 918 (11th Cir.), cert. denied, 464 U.S. 818 (1983); Esquire, Inc. v. Ringer, 591 F.2d 796 (D.C. Cir. 1978), cert. denied, 440 U.S. 908 (1979); infra text accompanying notes 369-73.

48. See Kieselstein-Cord v. Accessories by Pearl, Inc., 632 F.2d 989 (2d Cir. 1980); Durham Indus., Inc. v. Tomy Corp., 630 F.2d 905, 909-11, 914-15 (2d Cir. 1980); see also Eden Toys, Inc. v. Floreelee Undergarment Co., 697 F.2d 27, 33-34 (2d Cir. 1982); L. Batlin & Son, Inc. v. Snyder, 536 F.2d 480 (2d Cir.) (en banc), cert. denied, 429 U.S. 857 (1976). See generally Reichman, Designs After 1976, supra note 17, at 312-50 (quantitative and qualitative creativity in the Second Circuit). For more recent cases that struggle with and appear to retreat from this nascent regime of partial cumulation, see Brandir Int’l, Inc. v. Cascade Pac. Lumber Co., 834 F.2d 1142 (2d Cir. 1987); Carol Barnhart, Inc. v. Economy Cover Corp., 773 F.2d 411 (2d Cir. 1985); infra text accompanying notes 374-520.

49. See supra note 41; infra notes 526-52 and accompanying text.

50. See supra note 37. For current tendencies to treat slavish imitation as tortious misappropriation actionable in unfair competition law, especially with regard to new technologies, see, e.g., P.J. KAUFMANN, PASSING OFF AND MISAPPROPRIATION 83 (1986); Reichman, Intellectual Property in International Trade: Opportunities and Risks of a GATT Connection, 22 Vand. J. Transnat’l L. 747, 781-94 (1989) [hereinafter Reichman, GATT Connection].
these courts openly endorsed the views of the late Professor Melville Nim­
mer, whose influential treatise downplayed the codification of separability in
1976 and continued to advocate broad copyright protection of industrial
designs in keeping with the unity of art thesis established in France.51

2. Current Trends and the Quest for a Universal Solution

That it took the federal appellate courts only a few years to recapitulate
on these shores the chequered history of design protection law abroad
testifies to the universality of the phenomena under investigation.52 Viewed
prospectively, moreover, comparative analysis made it plausible to advance
three predictions concerning the future evolution of design protection law in
the United States on the basis of past developments abroad.

The first prediction was that the Court of Appeals for the Federal Cir­
cuit, which took office in 1982,53 would dismantle the judge-made barriers
to design patent protection inherited from the past and thereby enable the
Design Patent Act to implement its original goals.54 A second prediction
was that efforts to fashion a regime of partial cumulation between copyright
law and the design patent law would falter under pressure from judges and
commentators who refused to compromise with the principle of non­
discrimination.55 A third prediction was that the federal courts would
aggressively expand trademark and unfair competition law in order to pre­
vent slavish imitators from appropriating innovative commercial designs
that found no haven in positive intellectual property law.56

These predictions are borne out by a survey of the empirical data
for the period 1983 to 1990. Part II of the present Article accordingly
describes the evolution of United States design protection law after 1982,
with a view to demonstrating both the accuracy of these predictions and the
amplitude of their fulfillment.57

Part III considers why comparative analysis could predict legal out­
comes so different from those Congress ostensibly meant to obtain when it

51. “The Mazer opinion can be read to mean that any useful article, at least if it is aestheti­
cally pleasing in appearance, is subject to copyright protection with respect to its
form.” 1 M. & D. NIMMER, supra note 28, § 2.08[B][3]; see also Reichman, Designs
Before 1976, supra note 17, at 1152, 1211 n.347 (noting testimony of Barbara Ringer,
who identified Professor Nimmer’s views with “the concept of unity of art that some
countries follow” and contrasted them with the opposing views of Professor Deren­
berg); Latman, Fifteen Years After Mazer v. Stein: A Brief Perspective, 16 BULL. COPY·
52. See infra text accompanying notes 781-865.
53. See infra note 141 and accompanying text.
55. See id. at 381-82. For recent developments in Benelux law consistent with this same
prediction, see, e.g., Cohen Jehoram, Netherlands, supra note 46; Braun, supra note 46.
at 104-06.
56. See Reichman, Designs After 1976, supra note 17, at 335-36, 379, 382.
57. See infra text accompanying notes 319-31, 476-524, 725-80 (summarizing and evaluat­
ing these findings).
jettisoned the sui generis design bill in 1976.\textsuperscript{58} This inquiry will show that the behavior of industrial designs under domestic law has followed a cyclical pattern that oscillates between states of chronic underprotection and states of chronic overprotection.\textsuperscript{59} When this behavior is compared with that of industrial designs under foreign intellectual property laws, the same cyclical pattern emerges as a common characteristic of the design phenomenon in all relevant legal environments.\textsuperscript{60}

The study then examines the underlying causes of, and potential cures for, this cyclical behavior pattern that has so singularly disrupted the world's intellectual property system. Departing from the observation that industrial design is the oldest legal hybrid falling between the patent and copyright systems, the study finds that past regulatory action was distorted by an ingrained tendency to analyze the design problem in terms of either "art" or "inventions," that is to say, in terms of false premises suggested by the dominant legal paradigms.\textsuperscript{61} In contrast, recent difficulties in securing adequate legal protection for new technologies, such as semiconductor chip designs and computer programs, suggest that it is more fruitful to view industrial design as a precursor of the many legal hybrids that world intellectual property law would struggle to accommodate in the latter half of the twentieth century.\textsuperscript{62}

From this angle, the commercialization of applied scientific know-how appears to suffer from the same regulatory disabilities as have always afflicted industrial designs, and efforts to protect new technologies increasingly manifest the same cyclical pattern of behavior.\textsuperscript{63} This finding helps to explain why the demand for copyright protection of these technologies has grown so strident in recent years and why actual delivery of such protection frustrates many of the regulatory goals it is supposed to advance.\textsuperscript{64} Assimilating the problems that applied scientific know-how currently encounters to the difficulties that industrial design has always encountered also explains why sui generis design laws built on modified patent principles seldom succeed. By the same token, adoption of a modified copyright model could break the cyclical behavior patterns characteristic of both old and new legal hybrids operating in different legal environments.\textsuperscript{65}

The study recommends that those seeking to harmonize the design laws of the European Community should focus their attentions on a modified copyright approach not unlike that which the United States Congress

\textsuperscript{58} See supra note 22 and accompanying text.
\textsuperscript{59} See infra text accompanying notes 782-810.
\textsuperscript{60} See infra text accompanying notes 811-65.
\textsuperscript{61} See infra text accompanying notes 866-79.
\textsuperscript{62} See infra text accompanying notes 880-98.
\textsuperscript{63} See Reichman, Programs as Know-How, supra note 23, at 648-67; infra text accompanying notes 873-79.
\textsuperscript{64} See infra text accompanying notes 901-17.
\textsuperscript{65} See infra text accompanying notes 880-972.
neglected to enact in 1976.\textsuperscript{66} Such a model, once implemented by leading industrialized countries, could then influence the future course of design protection in the United States. It could also facilitate the elaboration of a sui generis law capable of dealing with advanced technological know-how on its own terms without the excesses of under- and overprotection that recur whenever incremental innovation is squeezed into legal paradigms devised for the regulation of art and inventions.\textsuperscript{67}

II. MORPHOLOGY OF UNITED STATES DESIGN PROTECTION LAW IN THE 1980s

A. A New Court Revives an Old Design Law

Although the Design Patent Act of 1842\textsuperscript{68} recognized ornamental designs of useful articles as patentable subject matter, it did nothing to soften the formal and substantive prerequisites of the full patent paradigm in the interests of promoting the decorative arts.\textsuperscript{69} In the early years, the federal judiciary appeared to accept the statutory policy at face value and allowed industrial designs to qualify for protection on fairly relaxed conditions.\textsuperscript{70} As the substantive prerequisites applicable to utility patents grew more stringent, however, courts began to question the social value of design patents that too readily enabled manufacturers to avoid competition by claiming to improve the appearance of articles reproduced in series. These doubts soon found expression in strict standards of nonfunctionality and of inventive height that exposed even design patents that the Patent and Trademark Office (PTO) had issued after full examination of the prior art to a high risk of judicial invalidation in the course of actions for infringement.\textsuperscript{71}

\textsuperscript{66} See infra text accompanying notes 935-37.

\textsuperscript{67} See infra text accompanying notes 917-72.


\textsuperscript{69} Section 171 of the Design Patent Act provides as follows: "Whoever invents any new, original, and ornamental design for an article of manufacture may obtain a patent therefor, subject to the conditions and requirements of this title. The provisions of this title relating to patents for inventions shall apply to patents for designs, except as otherwise provided." 35 U.S.C. § 171 (1988). The purpose of the Act was to stimulate the production of superior designs and not merely to recognize the creators' natural rights. See, e.g., Hudson, supra note 68, at 380-81; Nimetz, Design Protection, 15 COPYRIGHT L. SYMP. (ASCAP) 79, 80 n.1 (1967). The decision to follow a patent approach was influenced by the industrial nature of the material support as well as by purely historical factors. See id. (citing authorities).

\textsuperscript{70} See, e.g., Nimetz, supra note 69, at 122-25 (citing authorities).

\textsuperscript{71} See, e.g., id. at 83 (stating that "the hostility of the courts to patents in general and to design patents in particular makes a design patent a most uncertain form of protection"); id. at 113-28 (high standards of nonfunctionality and invention); see also infra notes 97-109 and accompanying text.
1. Three Decades of Suspended Animation: 1952-1982

By 1952, when the patent law underwent its last general revision, most observers believed that the design patent provisions had become too dysfunctional to accomplish their original purpose. But the revisers chose to ignore these provisions on the premise that a sui generis approach to the design problem was more consonant with the reform movement gathering momentum both here and abroad. In this spirit, the American intellectual property authorities developed an innovative, sui generis law providing short-term protection for ornamental designs of useful articles under a modified copyright approach that departed from the modified patent approach heretofore used in foreign law. When Congress ultimately rejected these proposals in 1976, it left the Design Patent Act exactly as it stood in 1952. This law still requires patentable designs to meet the same tests of semi-absolute novelty and of nonobviousness that are applied to utility patents and to undergo the same procedural ordeal of an examination at the Patent and Trademark Office based on a search of the prior art.

a. Novelty and Nonobviousness Compared

Ironically, most foreign design laws impose a more lethal standard of novelty than that found in the United States Design Patent Act. For exam-
ple, the novelty standard in some foreign laws displays a more absolute character as regards antecedent designs in prior use, although there is a recent tendency to limit the field of prior art both in temporal and geographical terms. Foreign design law may also insist on more quantitative distance between a candidate design and the prior art than the novelty standard customarily requires in this country. Apart from Japan and, lately, the Federal Republic of Germany, moreover, the novelty standard present in most foreign design laws lacks any grace period whatsoever.

The lack of a grace period means that even proprietors who commer-

79. See, e.g., Duchemin, General Report, supra note 8, at 63 (finding that foreign design laws characteristically require “objective and absolute novelty, implying the absence of precedents, with no limitations of time or space”).

80. For example, the Benelux countries “adopt the concept of objective but relative novelty: only models which during the fifty years preceding the deposit were actually familiar in the Benelux industrial or commercial circles concerned and which have not been deposited are taken into consideration.” Id. In the Federal Republic of Germany, the concept of novelty is also objective but relative to antecedents that are “familiar among specialized circles within the country or accessible to them without great difficulty.” Id. at 64. In the United Kingdom, novelty under the Registered Designs Act “is in theory absolute, but particular attention is paid to designs registered or published in the UK.” Fellner, United Kingdom, in ALAI 1984, supra note 8, at 141-42.

81. Compare infra note 89 and accompanying text with Duchemin, General Report, supra note 8 (stressing emphasis on objective novelty in Nordic countries, the Benelux countries, the Federal Republic of Germany, the United Kingdom, and Canada). Italy, however, has consistently applied a flexible standard of novelty to ornamental designs. See, e.g., Duchemin, General Report, supra note 8, at 64; Reichman, Designs Before 1976, supra note 17, at 1214 (stating that the “novelty requirement, although strict with regard to prior divulgation, is otherwise satisfied by a relative rather than an absolute measure of differentiation from the prior art”) (citing Fabiani). France, of course, is also an exception, since the concept of novelty under the Law on Design and Models of July 14, 1909, approximates that of originality in French copyright law. See, e.g., Duchemin, General Report, supra note 8, at 64 (quoting Pérot-Morel). For the atypical structure and character of the French design law owing to the influence of copyright law on all aspects of design protection under a regime of total cumulation, see, e.g., Pérot-Morel, France, in ALAI 1984, supra note 8, at 117-18.

82. See Law No. 125 of April 13, 1959 (Design Law) [Japan], as revised through 1975, reprinted in JAPANESE LAWS RELATING TO INDUSTRIAL PROPERTY (J.P.O. rev. ed. 1979). Although article 3(1) of the Japanese Design Law adopts the principle of absolute novelty, an exception under article 4(2) enables creators “to test the marketability of their designs by way of test sale, public display or distribution of samples.” T. Doi, THE INTELLECTUAL PROPERTY LAW OF JAPAN 100, 103-04 (1980). As regards the Federal Republic of Germany, § 7(a) of the Act Concerning Copyright in Designs as amended in 1986, supra note 4, introduced a six-month novelty grace period. See, e.g., Loschelder, The New German Model and Design Act, 19 I.I.C. 622, 629-30 (1988); see also E. Gerstenberg, GESCHMACKSMUSTERGESETZ 54-56 (2d ed. 1988); O. Von Gamm, GESCHMACKSMUSTERGESETZ (2d ed. 1989); B. Engler, GRUNDZÜGE DES RECHTSSCHUTZES INDUSTRIELLEN FORMGEBUNG 50-78 (1978).

83. Compare 35 U.S.C. §§ 102(b), 171 (1988) (one year novelty grace period in respect of public use and on sale bars) with Duchemin, General Report, supra note 8, at 65 (noting that “[w]ith the exception of France [and now the Federal Republic], all the [EC] countries require that the model not be disclosed before it is deposited”). In France, owing in part to the system of total cumulation between design law and copyright law, disclosure before deposit has no effect on the validity of design protection. See Duchemin, General Report, supra note 8, at 66; supra note 81.
cialize very creative designs without first meeting the costly deposit and registration requirements will destroy their own novelty and forfeit protection.\textsuperscript{84} What limits the availability of design protection in foreign law, therefore, is not just a cumbersome set of formal prerequisites\textsuperscript{85} or stiff registration requirements will destroy their own novelty and forfeit protection.\textsuperscript{86} Often a major

84. Compare, e.g., Loschelder, supra note 82, at 629 (praising amendments to design law in Federal Republic of Germany that now permit test marketing before registration) with Wibbens, The Relation Between Copyright and Industrial Property Law Protection of Designs and Models, in ALAI 1983, supra note 8, at 255, 258 (complaining that the Uniform Benelux Designs Law of 1975, supra note 4, provides no opportunity to test-market designs prior to registration without destroying novelty).

85. The "obligatory formalities of deposit and registration ... [are] considered to be the most reliable way of proving ... the date of creation and ... anteriorness," Duchemin, \textit{General Report}, supra note 8, at 65. In most of the industrialized countries, "there is no prior examination of substance nor any procedure for opposition" beyond "a purely formal check" that the applicant has complied with the regulations. \textit{Id.} at 67. However, an opposition procedure is permitted in Italy and in the Nordic countries, and the Italian authorities may control whether the deposited design meets the prerequisites of eligibility. See, e.g., id.; Fabiani, \textit{I Modelli e Disegni Industriali} [hereinafter Fabiani, \textit{I Modelli}], in 2 \textit{Diritto Industriale—Invenzioni E Modelli Industriali} 213, 253-54 (T. Ravà, M. Fabiani, & P. Spada eds. 1988) [hereinafter \textit{Invenzioni E Modelli Industriali}]. While these formal requirements are far less demanding than those under United States design patent law, see infra notes 93-96 and accompanying text, they are nonetheless costly and burdensome, especially for small- and medium-sized producers. See, e.g., Loschelder, supra note 82, at 637-38; Wibbens, supra note 84, at 258. In Japan, registered designs appear subject to a full examination like that in the United States. See, e.g., T. Doi, supra note 82, at 100-01. The situation in the United Kingdom under the Registered Designs Act of 1949, supra note 3, resembles that in the United States, given that a design in the U.K. "is examined for formal compliance with the regulations for application; to ensure that it fulfills the definition of a design; and for novelty. There is no opposition procedure." Fellner, \textit{United Kingdom}, in ALAI 1984, supra note 8, at 143. For developments in the U.K. after 1988, see infra notes 846, 943, 948-49 and accompanying text.

86. In the United Kingdom, designs dictated solely by function were excluded from the Registered Designs Act of 1949, supra note 3, and the House of Lords has stated that "those features of a design whose shape or configuration is determined by the job they do, and which therefore have received no design effort directed to their appearance as opposed to their function, are excluded from registration." Fellner, \textit{United Kingdom}, in ALAI 1984, supra note 8, at 142. At the opposite extreme, the Nordic design laws purport to embrace "all new forms regardless of technical effect or functionality." See, e.g., Levin, \textit{Nordic Countries}, in ALAI 1984, supra note 8, at 135-36. "However, it can be assumed that [a] purely functional design in most cases is to be regarded as 'banal,' i.e., only containing such elements which ought to belong to the general public[']s stock of forms." \textit{Id.} at 136. Moreover, Swedish courts recently have excluded highly functional designs altogether. \textit{Id.} Italian design law insists on some ornamental or decorative character and excludes purely technical or functional designs. See, e.g., Fabiani, \textit{Italy}, in ALAI 1984, supra note 8, at 131. The same is true in the Federal Republic of Germany, but in practice, "it rarely occurs that a form producing an aesthetic effect is exclusively technical." Dietz, \textit{Allemagne}, in ALAI 1984, supra note 8, at 87 (trans.). French design law, instead, makes no reference to a requirement of ornamentality and absorbs highly utilitarian designs, but it excludes purely technical and functional designs under several tests, notably a "multiplicity of forms test." See Perot-Morel, \textit{France}, supra note 81, at 119-20. For the introduction of a similar test into recent United States law, see infra text accompanying notes 269-302.

87. The fundamental substantive prerequisite under all foreign design laws is objective
handicap is the inability of proprietors to test-market designs in order to preselect a few that are worth the cost of registration from the many that are not.88

The situation under the United States Design Patent Act was just the opposite. The federal courts flexibly interpret the novelty requirement so as to disqualify only those designs that, viewed as a whole, do not differ from pre-existing designs in the eyes of an ordinary observer.89 More to the point, section 102(b) of the Patent Act of 1952 provides a one year novelty grace period for utility patents,90 which the provisions applicable to ornamental designs incorporate by reference. Designers in this country thus obtain some opportunity to test the market before incurring the expense of patent prosecution.91
If the American design law, as an integral part of the patent law, thus benefits from a workable novelty standard, the major disadvantage of this same linkage is that it brings into play all the formal and substantive prerequisites applicable to utility patents, including the requirement of nonobviousness. That the United States still requires protectable designs to undergo a search of the prior art and a qualifying examination, in addition to the obligations of deposit and registration, means that design protection here is slower and costlier to obtain than in many other industrialized countries. These procedural requirements are unsuited to the fast-moving but short-lived product cycle characteristic of today's market for mass-produced consumer goods.

Nevertheless, it was primarily the nonobviousness requirement that limited the availability of statutory design protection in this country from the 1920s on. Although the United States patent authorities issued some 88,000 design patents between 1959 and 1983, the patentees whose designs met the substantive prerequisites according to the examiners seldom benefited from the statutory monopoly when seeking to enforce their rights. On the contrary, the federal courts routinely invalidated design patents in the course of litigation by applying a stricter nonobviousness standard than that of the examiners and by superimposing rigid requirements of ornamental character.

the Federal Circuit declines to apply the experimental use exception to design patents that are otherwise subject to the public use bar. See In re Mann, 861 F.2d 1581 (Fed. Cir. 1988). In contrast, the best mode requirement of § 112 does not apply to design patents because the "mode" is determined by the drawings. Some verbal description may usefully explain the illustrations. See, e.g., Racing Strollers, Inc. v. TRI Indus., Inc., 878 F.2d 1418 (Fed. Cir. 1989).

94. See supra note 85.
95. Until recently, some major European countries, notably France and Italy, operated without an examination system for utility patents, and even today Italy seems to have retained a system of registration and publication of research results rather than a true examination system. See, e.g., Ubertazzi, Note introduttiva, in Ubertazzi, ed., Armonizzazione della normativa, supra note 4, at 558-59. Most European Community countries that examined utility patents had abolished such a requirement for industrial designs subject to sui generis legislation. See supra note 85; see also Duchemin, Les difficultes relatives a l'organisation d'un depot communautaire en matiere de dessins et modeles industriels [hereinafter Duchemin, Les difficultes], in Les Perspectives, supra note 7, at 173-81, 184-85, 190-203. Exceptions include the United Kingdom (registered designs), Ireland, and Japan. See supra note 85.
97. See, e.g., Nimetz, supra note 69, at 125-28. The nonfunctionality requirement was a close second. See id. at 113-21.
98. See Lindgren, The Sanctity of the Design Patent: Illusion or Reality?, 10 Okla. City U.L. Rev. 195, 204-07 (1985). About 16.5% of these were granted to foreign inventors; the percentage of design patents granted to foreign inventors increased to 23% in the period 1973 to 1983. Id. Altogether some 272,000 design patents reportedly issued between 1842 and 1983. Id.
99. See, e.g., Fryer, supra note 77, at 119 (noting that, despite the presumption of validity to be accorded examiners' decision, "the courts have had their own 'view' of how to
mentality and nonfunctionality that could eliminate any design that happened to survive these other ordeals.  

The traditional hostility of the federal judiciary to this particular branch of the domestic intellectual property system has been statistically demonstrated. For example, one survey of some 130 cases litigated between 1964 and 1983 found that the underlying design patent had been invalidated on various legal grounds about seventy percent of the time. But this figure was probably too optimistic for the 1960s as a whole, and it is definitely too pessimistic for the 1980s as a whole. A more significant finding is that the United States Court of Appeals for the Second Circuit, one of the nation's premier intellectual property courts, upheld only two design patents challenged for obviousness between the 1920s and the 1970s. Still more revealing was a set of official statistics published for the period 1968 to 1972, which showed an invalidation rate at the appellate level of one hundred percent, notwithstanding decisions by the patent examiners favorable to the patentees in each and every case.

As will be seen from data examined later in this Article, the rate of appellate invalidation tended to decrease from 1974 to 1983, and it has dramatically decreased since the establishment of the United States Court of Appeals for the Federal Circuit in 1982. The fact remains that relatively few industrial designs could promise their creators sufficient commercial rewards as to justify the expense of obtaining and defending a patent under the best of circumstances, while the prospects for enforcing issued design patents prior to the 1980s were so bleak that, in the words of Judge Giles S. Rich, "many felt it was not worth the effort and the protection [was] illusory."
b. Nonobviousness Means What It Says

In voting against a sui generis design law in 1976, some legislators seemed to believe that the federal courts could make the existing Design Patent Act more workable.110 If so, the standard of nonobviousness remained the logical place to start.111 In regard to utility patents, courts administered this standard by asking whether a given achievement would have been obvious at the time of invention to "a worker with ordinary skill in the art who had full knowledge of the prior art."112 In the case of designs, courts had likewise conjured up a fictitious "designer with ordinary skills in the pertinent art," who could better detect pre-existing influences underlying a candidate design than an ordinary purchaser who might succumb to the charm of a less original visual effect.113

Given this test, there were only two logical explanations for the practice of routinely invalidating issued design patents at the appellate level.114 Either the nonobviousness standard as imported from the domain of utility patents inherently lay beyond the reach of even the most gifted designers, or courts had artificially elevated the standard of nonobviousness applicable to designs to avoid undue restraints on trade.115 If the former was true, then

---

110. Chairman Kastenmeier expressly mentioned this possibility at hearings held in 1975. See Reichman, Designs After 1976, supra note 17, at 362-63.

111. See supra text accompanying notes 97-109.

112. See 1 D. CHISUM, supra note 3, § 1.04[2], at 1-200, § 5.04[1].

113. See id. § 1.04[2] (citing cases).

114. See supra notes 102-05 and accompanying text.

115. See supra notes 69, 92; Nimetz, supra note 69, at 127 (stating that courts used the...
less biased courts could reinterpret the standard so as to implement the original policies behind the Design Patent Act of 1842. If the latter explanation proved correct, then courts could undo much of the mischief they had caused by a more evenhanded application of the general nonobviousness standard as conventionally formulated.

From a comparative perspective, foreign courts that administered sui generis design laws built on the patent model had faced similar dilemmas without elevating the requirements of novelty and qualitative originality to unattainable heights. Italian courts, in particular, working with a rigid design patent law rather like that of the United States, had deliberately softened the statutory test of intrinsic novelty—akin to nonobviousness—on the theory that the strict standards applicable to both utility patents and utility models would not serve to promote the decorative arts.

No evidence has been found to suggest that these or other foreign practices influenced judicial application of United States design patent law, in the way that Italian law had directly influenced the domestic copyright standard of separability promulgated in 1958 and codified in 1976. Nevertheless, the United States Court of Customs and Patent Appeals (C.C.P.A.), in 1966, introduced a lower standard of nonobviousness for ornamental designs that paralleled prior developments in Italian law.

---

116. For the original policy, see supra note 69 and accompanying text; see also Gorham v. White, 81 U.S. (14 Wall) 511 (1871) (still the leading Supreme Court decision on design patents, which favorably viewed the statutory policy of stimulating design innovation).

117. Nothing in the statute "suggests the need for a disproportionately high standard" or obliges courts "to exaggerate the degree of nonobviousness required of miniscule design innovations that possess significant commercial value." Reichman, Designs After 1976, supra note 17, at 362.

118. See supra notes 79–82, 86–87 and accompanying text. Nevertheless, the eligibility requirements under most foreign design laws remain too high, even if not so high as those in the United States. See infra text accompanying notes 848–58.

119. See Italian design law, supra note 4; Reichman, Designs Before 1976, supra note 17, at 1213–14 (citing authorities).

120. See, e.g., Benussi, supra note 8, at 64–65 (stating that the Italian courts’ “flexible criterion of assessment” looks only for “a particular esthetic quality given to an industrial product in relation to the usual appearance of products in the same sector,” and noting a recent tendency to lower the requirement in more crowded fields where “possibilities for . . . variations are necessarily limited”). As a result, challenges for lack of inventive height seldom appear to succeed under Italy’s design law, although its novelty requirement, which lacks a grace period, destroys proportionately more designs than the novelty requirement of American law. See, e.g., Fabiani, I Modelli, supra note 85, at 240–43 (stressing minimum level of “new creative contribution” required of designs); see also Z.O. ALGARDI, DISEGNO INDUSTRIALE E ARTE APPLICATA 90–91 (1977).

121. See infra notes 341–42 and accompanying text.

In the case of *In re Laverne*, 123 the C.C.P.A. — speaking through Judge Giles Rich — observed that the usual test of nonobviousness would negate all patent protection for ornamental designs if courts construed the distinction between routine mechanics and true inventors so as to exclude the entire output of "competent designers." It was the competent designers who, in Judge Rich's estimation, ultimately brought about any progress in the field of industrial design. 124 To be sure, Judge Rich did not say that section 103 of the Patent Act required no more than a competent designer might produce. 125 Rather, the object was to enable such designers to protect at least some of their work. To this end, the C.C.P.A. proposed a new test for obviousness based on the "ordinary intelligent man," who would assess the visual impact of a candidate design with less technical refinement than "the designer of ordinary skill in the art." 126 The policy behind this test aimed to promote innovative industrial design by aligning the standard of eligibility with the pristine goal of the Design Patent Act of 1842. 127

If a similar strategy appears to have worked rather well in Italy, where courts seldom invalidate patented designs for lack of "intrinsic novelty," 128 it failed in the United States. The other appellate courts, with one exception, 129 refused to follow the C.C.P.A. and rejected what they viewed as a move "to equate obviousness with novelty in the case of design patents" without an express legislative mandate. 130 Because of the split in the circuits after *Laverne*, the design patent law operated with a lower threshold of

124. *Id.* at 1006. The court noted that the distinction between "patents for inventions" and "patents for designs" in 35 U.S.C. § 171 "would seem to indicate a legislative consciousness that 'inventions' and 'designs' are different in kind." *Id.* at 1005.
125. *Id.* at 1006.
126. "The test is inherently a visual test. . . . No special skill is required to determine what things look like, though individuals react differently. It is bound to be an individual reaction." *Id.*
127. *Id.; see supra* note 124. By upholding the validity of a patented American variant on Saarinen's famous chair, the court arguably increased the availability of design patent protection by enlarging the range of patentable variations. By the same token, however, the court may have weakened the scope of protection for patented designs because it did not view the American design as falling within the range of equivalents covered by Saarinen's own patent. *See, e.g.*, Thompson, *supra* note 96, at 190, 199 (implying that the scope of a design patent will not extend beyond literal copying).
128. *See supra* note 120 and accompanying text.
129. *See Schwinn Bicycle Co. v. Goodyear Tire & Rubber Co.*, 444 F.2d 295 (9th Cir. 1970) (purporting to apply the ordinary observer standard but in so strict a manner as to defeat its purpose); *see also* Mayview Corp. v. Rodstein, 620 F.2d 1347 (9th Cir. 1980).
130. Hadco Prods., Inc. v. Walter Kiddie & Co., 462 F.2d 1263, 1265 (3d Cir. 1972). *See generally* I D. CHISUM, *supra* note 3, § 104[2], at 1-203 to 1-204 (citing cases); Fryer, *supra* note 77, at 118-19. The congressional decision not to enact a special design law in 1976 could therefore also be construed as an express mandate to maintain the status quo and as an implicit disavowal of *Laverne*. *Cf.* Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 150 (1989) (stating that the novelty and nonobviousness requirements express a congressional determination of the desired level of competition).
eligibility in some jurisdictions than in others, a situation that encouraged forum shopping.

In 1981, the Court of Customs and Patent Appeals ended the Laverne experiment and, in In re Nalbandian, closed the split in the circuits it had opened in 1966. Henceforth the C.C.P.A. agreed to measure obviousness in terms of a "designer of ordinary capability who designs articles of the type presented in the application." The court, however, would allow applicants to demonstrate their attainment of this standard more objectively than in the past through the use of expert testimony by designers working in the pertinent field.

This return to an orthodox doctrinal formulation did not mean that the Court of Customs and Patent Appeals had acquiesced in the practice of exaggerating the degree of nonobviousness required of design innovation. In a series of opinions posterior to Nalbandian, panels of the C.C.P.A. attacked the tendency of sister courts to disassemble patented designs into their component parts and then to subject these parts to piecemeal evaluation against the prior art, usually with twenty-twenty hindsight and without regard to commercial success. The correct approach, as the C.C.P.A. now saw it, required a patented design challenged for obviousness to be tested as a visual whole against existing references pertinent to the ensemble without piecemeal dissection of its component parts. The court hinted, moreover, that secondary considerations, especially copying and commercial success, were respectable indicia of nonobviousness in the design environment, a point it had not made in Nalbandian.

The Court of Customs and Patent Appeals thus ended its days by bequeathing a more workable set of binding doctrinal tools to its successor—the Court of Appeals for the Federal Circuit—than had previously

132. Id. at 1216.
133. Id.
134. See id. at 1217; Fryer, supra note 77, at 119.
135. Fryer, supra note 77, at 119. Professor Fryer, however, notes the tendency of skilled designers to disagree when called as experts.
136. See, e.g., In re Carter, 673 F.2d 1378 (C.C.P.A. 1982); In re Rosen, 673 F.2d 388 (C.C.P.A. 1982).
137. See supra note 136; Reichman, Designs Before 1976, supra note 17, at 1223-24, 1223 n.414, 1224 n.415 (describing these practices and criticizing courts for "acting upon a virtually conclusive presumption that combination designs were obvious as a matter of law," notwithstanding the presumption of validity that nominally attached to the patent itself).
138. See, e.g., Rosen, 673 F.2d 388 (stating that "there must be a reference to something in existence, the design characteristics of which are basically the same as the claimed design, in order to support a holding of obviousness"); see also Carter, 673 F.2d 1378; In re Spreter, 211 U.S.P.Q. (BNA) 866 (C.C.P.A. 1981).
139. See, e.g., Rosen, 673 F.2d 388.
140. See Nalbandian, 611 F.2d at 1218.
141. The Federal Circuit was formed through a merger of the former Court of Customs and Patent Appeals and the Court of Claims. The new court has declared that all decisions
been available, even though the C.C.P.A. validated very few design patents in this period. At the same time, other federal courts had begun to conclude that “blind opposition to the design patent was counterproductive.” Between 1974 and 1982, a number of decisions at both the appellate and district court levels upheld and enforced design patents under a more flexible reading of the nonobviousness standard than was customary during the preceding half century.

2. Transitional Holding Patterns: 1982-1986

By 1982, when the Court of Appeals for the Federal Circuit began to implement the congressional call for a specialized tribunal that would develop a uniform and more rational patent system, there were many patents heralding “the end of the antipatent era.” Not the least of these were the Supreme Court's ground-breaking decisions concerning microbiology and computer programs, which may indirectly have improved the outlook for industrial designs. Any lasting improvement in the climate for design patents, however, depended on the willingness of the Federal Circuit to undertake a searching reevaluation of the nonobviousness requirement in general, with a view to preventing issued utility patents from succumbing to facile judicial invalidation.

of the predecessor courts rendered before the close of business September 30, 1982, will be considered binding. See, e.g., South Corp. v. United States, 690 F.2d 1368, 1370 (Fed. Cir. 1982).

142. Compare, e.g., Rosen, 673 F.2d 388 (reversing the rejection of an application for furniture design for obviousness) with Carter, 673 F.2d 1378 and Spreter, 211 U.S.P.Q. (BNA) 866 and Nalbandian, 611 F.2d 1214 (all holding designs invalid for obviousness).

143. Reichman, Designs After 1976, supra note 17, at 363.

144. See id. at 334-35, 362-65 (citing cases). Notable in this period were Contico Int'l, Inc. v. Rubbermaid Commercial Prods., Inc., 665 F.2d 820 (8th Cir. 1981) (trash can dolly); Lancaster Colony Corp. v. Aldon Accessories, Inc., 506 F.2d 1197 (2d Cir. 1974) (modern ash tray); see also Schnadig Corp. v. Gaines Mfg. Co., 494 F.2d 383 (6th Cir. 1974).


146. See Adelman, supra note 145, at 981-83, 982 n.12. According to Professor Adelman, the year 1982 marked the end of the antipatent era in that the authorities eased the pressure from antitrust law, the Supreme Court enlarged the scope of patentable subject matter, the Patent and Trademark Office was upgraded, and Congress created the Court of Appeals for the Federal Circuit. id. at 981.


148. See, e.g., Nimetz, supra note 69, at 83 (relating strong judicial hostility to design patents in the 1950s and 1960s to more diffuse judicial bias against utility patents during the same period). Rendering § 103 of the Patent Act of 1952 more manageable was essential to a strong patent system, which in turn was allegedly needed to meet the challenge of foreign competition. See, e.g., Adelman, supra note 145, at 982 n.14.
The steps taken by the Court of Appeals for the Federal Circuit to overhaul prior jurisprudence and enhance the value of utility patents in recent years are largely beyond the scope of this Article. Nevertheless, the emphasis this court has placed on the role of secondary considerations in the evaluation of nonobviousness generally is of such overriding importance for an understanding of current trends in design patent law that some preliminary observations on this topic are in order.

a. The Emerging Role of Secondary Considerations

As early as 1966, the United States Supreme Court, in Graham v. John Deere Co., had included secondary considerations among the various subtests it allowed lower courts to apply when evaluating utility patents challenged for obviousness. The federal appellate courts could therefore assess such nontechnical, objective factors as commercial success, fulfillment of a long-felt need in the trade, and copying by an alleged infringer at the same time as they subjectively measured the inventive height of a given innovation in terms of the routine skill of an ordinary engineer familiar with the prior art.


149. See supra note 148 (citing authorities).
150. See generally Adelman, supra note 145, at 987-1007.
152. The so-called subjective tests of nonobviousness under 35 U.S.C. § 103, as mandated by Graham, require courts to ascertain: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; and (3) the differences between the prior art and the claimed invention. Id. at 17-18. The Supreme Court also authorized the use of nontechnical, objective factors, called secondary considerations or subtests of nonobviousness, which focus on “the economic and motivational aspects” rather than “technological aspects” of the issue. See, e.g., Note, Secondary Considerations, supra note 148, at 357-59; see also Note, Subtests of “Nonobviousness”: A Nontechnical Approach to Patent Validity, 112 U. Pa. L. Rev. 1169, 1172 (1964) [hereinafter Note, Subtests of Nonobviousness]. How and when such factors were to be applied after Graham remained controversial.
153. See, e.g., Merges, supra note 148, at 816; Note, Secondary Considerations, supra note 148, at 358 (citing cases). Other secondary factors include licensing to potential competitors (acquiescence of the trade), progress of the patent application through the PTO, nearly simultaneous invention by another researcher in the field, professional approval by experts in the field, and the failure of others to make the same invention.
154. See Merges, supra note 148, at 815 (stating that the Federal Circuit has made Graham—along with the secondary considerations—“the cornerstones of nonobviousness”).
In the past, however, courts tended to apply the Graham tests of nonobviousness in such a restrictive fashion that appeals to secondary considerations did little to prevent judicial invalidation of a large proportion of the utility patents litigated in the period 1966 to 1982. In overriding both the examiners' favorable decisions and the presumptions of validity supposed to derive from them, many judges actually evaluated the teachings disclosed in a patent as of the time its validity was challenged rather than as of the time the invention was made. Courts in this mood either neglected the secondary considerations altogether or applied them in a half-hearted manner that normally served to corroborate their own intuitive findings of obviousness.

In contrast, the Court of Appeals for the Federal Circuit, deploring any devaluation by hindsight, held that the secondary considerations constituted one of four basic subtests applicable to all utility patents challenged for obviousness under section 103 of the Patent Act. The federal district courts must accordingly evaluate objective factors, including commercial success, in every relevant case, and these so-called secondary con-


156. See, e.g., P. ROSENBERG, supra note 77, § 17.05 (presumption of validity); Adelman, supra note 145, at 991-92.

157. See, e.g., Mintz & Racine, Anticipation and Obviousness in the Federal Circuit, 13 A.I.P.L.A. Q.J. 195, 212 (1985) (stating that hindsight inherently diminishes the perceived level of inventive height); see also P. ROSENBERG, supra note 77, at 9-16 (stressing that the test is "not what would have been obvious to a judge after reading the patent in suit and hearing the testimony"). For evidence that case law was affected by an anti-patent bias rooted in early laissez-faire economic theory, see Nimetz, supra note 69, at 98-102.

158. See supra note 155. The conventional formula for downgrading secondary considerations was to find them relevant only when the outcome of the nonobviousness test was ambiguous on the basis of the primary, subjective considerations of the prior art. See, e.g., Walker v. General Motors Corp., 362 F.2d 56, 60 (9th Cir. 1966); Note, Secondary Considerations, supra note 148, at 358.


161. See, e.g., Simmons Fastener Corp. v. Illinois Tool Works, Inc., 739 F.2d 1573, 1575-76 (Fed. Cir. 1984) (holding that evidence of commercial success required finding of nonobviousness even though invention would have been obvious on basis of prior art considerations alone), cert. denied, 471 U.S. 1065 (1985); Rosemount, Inc. v. Beckman Instruments, Inc., 727 F.2d 1540, 1546 (Fed. Cir. 1984) (noting that objective factors...
considerations may greatly affect the final outcome of patent litigation. The Federal Circuit has also insisted that district courts assess nonobviousness as of the time the invention was made, that they avoid all recourse to hindsight, and that they respect the presumption of validity that the statute confers upon every patentee.

Any resolute rehabilitation of secondary considerations in the realm of utility patents should then logically extend to the judicial evaluation of design patents as well. Implementing this logic, however, presented certain practical difficulties and posed a real dilemma for the court. On the one hand, continued judicial annihilation of design patents would become inconsistent with the Federal Circuit's overall approach. On the other hand, full application of the secondary factors to design patents without some countervailing doctrinal limitations could produce a still more protective environment than has so far emerged in the realm of utility patents.

are entitled to great weight); Stratoflex, 713 F.2d at 1538 (stressing burden of proof on challenger of invalidity).

162. See, e.g., Alco Standard Corp. v. Tennessee Valley Auth., 808 F.2d 1490 (Fed. Cir. 1986) (holding patent valid essentially on basis of commercial success); Hodosh v. Block Drug Co., 786 F.2d 1136, 1143-44 (Fed. Cir. 1986) (requiring evidence of secondary considerations to be evaluated independently of what any real person knows about prior art); Simmons Fastner Corp. v. Illinois Tool Works, Inc., 739 F.2d 1573, 1575-76 (Fed. Cir. 1984) (holding that evidence of commercial success alone may require reversal of a finding of invalidity), cert. denied, 471 U.S. 1065 (1985); see also Mintz & Racine, supra note 157, at 217 (stating that the Federal Circuit has "emphatically endorsed" application of secondary factors in patent infringement litigation and in ex parte prosecutions of patent applications); Merges, supra note 148 (criticizing this approach).

163. See, e.g., P. Rosenberg, supra note 77, at 9-16; Mintz & Racine, supra note 157, at 212.

164. See, e.g., Fryer, supra note 77, at 119. In regard to utility patents, for example, it is assumed that judges can measure the distance between the prior art and a new technical achievement on the basis of scientific criteria and technical data that are consistent for all decision-makers faced with a similar evaluation. See Graham v. John Deere Co., 383 U.S. 1, 35 (1966). Moreover, there is implicitly a further judgment about the level of incentives needed in a given field, in relation to the rules of free competition that otherwise apply. See, e.g., Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 150 (1989); Nimetz, supra note 69, at 127. In the case of appearance designs, courts cannot measure the distance between any given aesthetic contribution and its predecessors without succumbing to value judgments that are hard to quantify and unreliable at best. See, e.g., 1 D. Chisum, supra note 3, § 1.04[2], at 1-199 to 1-200 ("[N]ot surprisingly, the courts openly admit that any assessment of the obviousness of the [design] solution is necessarily subjective."); Nimetz, supra note 69, at 122 (noting that no socially accepted concept of artistic progress exists to guide the courts). Use of expert testimony appears to formalize these inherent uncertainties without providing a firm basis for resolving them. See, e.g., Fryer, supra note 77, at 119. While value judgments about art are impermissible under general principles of copyright law, lest veiled forms of censorship prevail, see Bleistein v. Donaldson Lithographing Co., 188 U.S. 239 (1903), the contestability of any judgment about matters of taste renders the patent examiners' decisions to grant design patents easier to challenge than is true of inventions generally. See Nimetz, supra note 69, at 113.

165. See supra notes 159-63 and accompanying text.

166. Whether the Federal Circuit has become a "plaintiffs" court or not is controversial.
Consider, for example, that only the commercially successful appearance designs attract imitators, while the market for mass-produced consumer goods moves at a rapid pace that makes close copying the typical mode of infringement. Yet, both “commercial success” and “copying” constitute secondary factors entitled to considerable weight in the evaluation of utility patents. Even if the Federal Circuit were to require design patent owners to establish a closer nexus between commercial success and the challenged components of protected designs than it has so far required of plaintiffs suing to enforce utility patents, routine reliance on commercial success and copying would significantly narrow the opportunities to invalidate patented designs.

One should therefore expect the rate of invalidation for obviousness to decrease sharply if the Federal Circuit decided to evaluate design patents in light of the same objective criteria it has applied to utility patents in the name of Graham. In approaching the case law from 1982 on with this hypothesis in mind, however, it seems logical to ask whether the Court of Appeals for the Federal Circuit was prepared to make such a radical break with the past. If it was, one also needs to ask how the court would seek to ensure a proper balance between innovation and competition under a revitalized design patent law in which commercial success was likely to figure in every action for infringement.

b. Evenhanded Tests of Nonobviousness

During the period 1982 to 1986, the evidence suggests that the Court of Appeals for the Federal Circuit began cautiously to disentangle the

For the view that the patent courts as a whole have been neutral or evenhanded, see Dunner, supra note 148, at 185-94 (including statistical tables).

167. See supra note 153 and accompanying text. Few of the myriad designs launched onto the market in any given year will attain commercial success. See, e.g., Duchemin, La protection, supra note 8, at 34-37. But once a design captures the public's fancy, slavish imitation gives competitors a price advantage and eliminates the originators' lead time. See, e.g., Brown, supra note 32, at 1386-95; Nimetz, supra note 69, at 108-09. Moreover, a primary purpose of most appearance designs, as distinct from functional designs, is to induce the public to purchase marginally differentiated products whose technical yields tend to be standardized. See generally F. Perret, supra note 8, at 9-21.

168. See, e.g., Demaco Corp. v. F. Von Langsdorff Licensing Ltd., 851 F.2d 1387, 1392-93 (Fed. Cir. 1988) (finding that the commercial response to an invention provides objective evidence of how it is viewed in the marketplace). While plaintiff bore the burden of proving a nexus between commercial success and the patentable features, a prima facie showing of this nexus shifted the burden onto the defendants of proving that success was due to extraneous factors. Id.

169. See, e.g., Merges, supra note 148, at 861 (arguing that a test of commercial success rewards marketing advantages, such as a superior distribution system or access to capital, and favors monopoly power); id. at 876 (arguing for less use of secondary factors in regard to utility patents); see also Emery, Patent Law: Obviousness, Secondary Considerations, and the Nexus Requirements, 1986 Ann. Surv. Am. L. 117 (1986).

170. See infra text accompanying notes 323-30.

171. In point of fact, the period under review in this subsection extends from 1982 to 1985,
Design Protection and the New Technologies

1989

Design patent law from past judicial encumbrances without formulating a comprehensive policy concerning the proper role of the Design Patent Act in the absence of legislative reform. For its opening move, the court insisted that design patents challenged for obviousness were entitled to a genuine presumption of validity that saddled the challenger with the twin burdens of going forward and of overcoming the examiner’s findings by clear and convincing proof.\(^{172}\) The Federal Circuit then proceeded to ratify the same standard of obviousness that the Court of Customs and Patent Appeals had applied to design patents between 1979 and 1982.\(^{173}\) Both the district courts and the examiners would accordingly continue to test the inventive height of an ornamental design by reference to the skill of an ordinary designer working in the relevant field of endeavor and not by reference to the impression it made upon an ordinary observer unskilled in the art.\(^{174}\)

At the same time, the Federal Circuit endorsed the C.C.P.A.’s last strictures against piecemeal decomposition of candidate designs either at the prosecution stage or for purposes of invalidating issued design patents. A finding of obviousness would thus continue to depend on references to comparable art and not merely to bits and pieces of unrelated design solutions.\(^{175}\) The court also stressed the need to measure obviousness against the level of prior art existing at the time a design was created, and it strictly forbade devaluation through hindsight.\(^{176}\) The Federal Circuit then broke new ground by holding that all the subtests currently used to determine the nonobviousness of utility patents,\(^{177}\) including the secondary considerations, should apply to design patents as well.\(^{178}\)

The court did not relish the consequences of its own logic, however. True, it declined to invalidate a number of successful designs on the

---


\(^{173}\) See supra notes 131-42 and accompanying text.

\(^{174}\) See, e.g., Shelcore, Inc. v. Durham Indus., Inc., 745 F.2d 621 (Fed. Cir. 1984); Litton, 728 F.2d at 1443; In re Nalbandian, 661 F.2d 1214 (C.C.P.A. 1981), rev’d In re Laverne, 356 F.2d 1003 (C.C.P.A. 1966); see also supra notes 131-35 and accompanying text. The Federal Circuit thus declined to soften the standard of eligibility for design patents by judicial interpretation, as the C.C.P.A. had tried to do in the period 1966 to 1980. See supra notes 122-35 and accompanying text.


\(^{176}\) See, e.g., Shelcore, 745 F.2d at 628; Litton, 728 F.2d at 1441.

\(^{177}\) See supra text accompanying notes 159-63.

grounds that they represented mere adaptations or modifications of the prior art,179 a favorite tactic of federal appellate courts hostile to design protection in the past.180 It even recognized that, of all the objective factors inherited from Graham v. John Deere Co., "copying" deserved particular weight in the judicial evaluation of patented designs challenged for obviousness.181 But the Federal Circuit distrusted the results to which uncritical reliance on commercial success might lead in the design milieu, acknowledging that such success could depend as much on brand loyalties, advertising, and functional efficiency as on the superiority of the designer's creative art.182 The court thus recognized, in the context of industrial designs, some of the very drawbacks to applying the secondary considerations that critics would later raise in connection with utility patents.183

Nevertheless, the treatment that the Federal Circuit afforded ornamental designs challenged for obviousness during the period under review appears evenhanded and, on the whole benign, especially in light of the judicial bias against design patents that used to prevail outside the C.C.P.A. Of eight cases concerning the validity of design patents known to have reached the Federal Circuit between 1982 and the first quarter of 1986,184 only one actually resulted in a decision to invalidate for obviousness.185 Of

179. See, e.g., Trans-World Mfg. Corp. v. Al Nyman & Sons, Inc., 750 F.2d 1552 (Fed. Cir. 1984) (affirming finding that design of eyeglass display rack was not obvious); Shelcore, 745 F.2d 621 (holding design for driving simulator toy not invalid for double patenting).
180. See supra note 137 and accompanying text.
181. See, e.g., Fiberglass in Motion, Inc. v. Hindelang, No. 83-1266 (Fed. Cir. Apr. 19, 1984) (unpublished); see also Trans-World, 750 F.2d 1552; Thompson, supra note 96, at 163 (noting that Trans-World was a case of "outright theft"). In Fiberglass in Motion, the court rejected a defense based on an industry practice of copying and declared that such "behavior evidences disregard for the property rights . . . in the creative products of others."
183. See supra note 169 (presenting views of Merges).
185. See Petersen, 740 F.2d 1541 (affirming the finding that design for "locking plier-type wrenches and other 'hand tools'" was invalid for obviousness); infra text accompanying notes 221-33; see also Cardiac Pacemakers, Inc. v. Coratomis, Inc., 702 F.2d 671 (8th Cir. 1983) (affirming the finding that design for surgically implantable heart pacemakers was obvious).
the remainder, one was found invalid for lack of ornamentality; an­other lacked novelty under the “on sale” bar of section 102(b); while five of the eight patents in question were upheld on appeal. This represented an invalidation rate of some thirty-eight percent, as compared with an invalidation rate of from seventy-five to one hundred percent for the federal appellate courts only a few years earlier.

c. Uncertain Standard of Functionality

Courts hostile to design patents in the past often suspected manufacturers of trying to use this institution to circumvent the stringent requirements governing utility patents. On its face, the Design Patent Act protects only the decorative features or appearance of a useful article and not its functional aspects. But modern industrial design blurs this legal distinction by programmatically avoiding the separation of form and function. The more perfectly a designer integrates the two in a patented creation, the more likely it becomes that his legal monopoly of form will yield indirect control over functional components of the underlying product that have not met the tests of novelty and nonobviousness.

From a worldwide perspective, however, the industrialized countries seem increasingly disposed to protect even functional designs that fail to

186. See Feuling v. Wood, Nos. 84-543, 84-662 (Fed. Cir. Nov. 30, 1984) (unpublished) (holding that designs of fan housing on air-cooled engine and of mounting stand for attaching accessory to engine lacked ornamentality and were primarily functional).
188. These included Unette, 785 F.2d 1026; Trans-World, 750 F.2d 1552; Shelcore, 745 F.2d 621; Litton, 728 F.2d 1423; Fiberglass in Motion, Inc. v. Hindelang, No. 83-1266 (Fed. Cir. Apr. 19, 1984); see also Kwik-Site Corp. v. Clear View Mfg. Co., 758 F.2d 167 (6th Cir. 1985) (three designs of see-through rifle sights were held valid and infringed below; two invalidated for functionality on appeal).
189. The rate of invalidation at the district court level is, of course, different, but of little statistical interest in this period because the Federal Circuit had not yet emitted clear signals about design patents. See, e.g., Thompson, supra note 96 (criticizing district courts’ activity in this period).
190. See supra notes 102-05 and accompanying text.
191. See, e.g., Nimetz, supra note 69, at 115-20, 127.
192. See 35 U.S.C. § 171 (1988); Warbern Packaging Indus. v. Cut Rate Plastic Hangers, Inc., 652 F.2d 987 (2d Cir. 1981); Blisscraft of Hollywood v. United Plastics Co., 294 F.2d 694, 696 (2d Cir. 1961). While the design must “appeal to the eye,” the requirement is one of industrial aesthetics, not “beauty” in a purely artistic sense. See, e.g., Contico Int’l, Inc. v. Rubbermaid Commercial Prods., Inc., 665 F.2d 820, 825 (8th Cir. 1981) (“Perhaps it is too much to expect that a trash-dolly can be beautiful. It is enough that it is not ugly, especially when compared to prior designs.”).
193. See generally I D. CHISUM, supra note 3, § 1.04[2][d].
195. See, e.g., F. PERRET, supra note 8, at 11-16; Fryer, supra note 77, at 119-21; Nimetz, supra note 69, at 114-16, 120-21.
meet the standards of patentability, and some exotic legal paraphernalia have been concocted for this purpose. For example, the Federal Republic of Germany, Italy, and Japan provide direct protection of functional designs under utility model laws in addition to sui generis protection of appearance designs. Although utility model laws, which are growing in popularity, operate with a stricter legal discipline than that of the design laws, they weaken the standards nominally supposed to govern a mature patent system in subtle and indirect ways. Some countries that remain unwilling to protect utility models nonetheless tolerate a rather high degree of functional content in appearance designs protectable under sui generis design laws. Most industrialized countries, following the lead of the United States, have also begun to protect integrated circuit designs in special laws embodying modified copyright principles. One country, the

196. See, e.g., 2 S. Ladas, supra note 1, at 949-56; Hausser, Utility Models: The Experience of the Federal Republic of Germany, 26 INDUS. PROPR 314 (1987); Reichman, Designs Before 1976, supra note 17, at 1217-21 (case of Italy); The Utility Model Law of Japan, Law No. 123 of 1959, reprinted in JAPANESE LAWS RELATING TO INDUSTRIAL PROPERTY 61-88 (I.P.O. rev. ed. 1979). The Japanese law, enacted in 1905, was modelled on that of Germany, but it soon evolved into a petty patent law that favored small, domestic inventions. See, e.g., T. Doi, supra note 82, at 68-70.


198. In the Federal Republic of Germany, for example, the utility model law classically protected three-dimensional forms of tools and implements, articles of everyday use, or parts thereof for six (now eight) years on condition of "novelty" and "inventiveness." But the novelty standard is more permissive than that of utility patents (and includes a six-month grace period), while the standard of invention tends to be lower in practice than that applied to utility patents, despite a certain formal allegiance to the standard of nonobviousness. See, e.g., Hausser, supra note 196, at 314-16. Moreover, utility models are not examined and can be obtained by mere registration, which delivers immediate protection. Id. at 316-18 (noting that patent and utility model applications are often filed conjointly for this reason). The utility model law of the Federal Republic was recently updated, with an extension of subject matter eligibility to include electrical circuits (qua tools or articles of everyday use, which were previously excluded). The amendment also codified a standard of invention requiring a mere "inventive act" as distinct from the "inventive activity" of the patent law. See Utility Model Act of January 1, 1968, § 1, as amended Aug. 28, 1986, reprinted in GERMAN LAWS, supra note 4, at 72-81 (English test); Hausser, supra note 196, at 315-16.

199. For example, the tendency is to broaden the sweep of utility models beyond the protection of functional configurations to petty patents in general, which some view as a boon to smaller-and medium-sized firms. See, e.g., Hausser, supra note 196, at 316, 318-19. But critics see the utility model as an illogical and unwarranted derogation from the general patent system and from the rules of competition it sustains. See, e.g., F. Perret, supra note 8, at 188-233; Pétrot-Morel, L'ambiguïté du concept de modèle d'utilité, in ETUDES EN L'HONNEUR DE R. FRANCESCHETTI 425 (1983).

200. See, e.g., Levin, Recent Developments, supra note 87, at 606-08 (stating that "awareness of the protection of functional designs has been decisive for the creation of the Nordic sui generis design protection system and its limits"); see also Levin, Applied Art: On the Borderline Between Copyright and Design Protection in Nordic Law [hereinafter Levin, Applied Art], in ALAI 1983, supra note 8, at 275-76, 280-81; supra note 86.

201. See, e.g., S.M. Stewart, INTERNATIONAL COPYRIGHT AND NEIGHBORING RIGHTS 333-42
United Kingdom, has just enacted a sui generis law conferring copyright-like protection on both functional and aesthetic designs that are not subject to either a registration requirement or statutory prerequisites of novelty and inventive merit.\footnote{202}

Formally, the United States has never considered adopting a utility model law like those enacted in Italy, Japan, or the Federal Republic of Germany. The Semiconductor Chip Protection Act of 1984\footnote{203} does protect a single class of functional designs, however, without insisting on either novelty or nonobviousness.\footnote{204} For this and other reasons, the Act has been treated as a "neighboring right," allied to and collocated with the Copyright Act of 1976,\footnote{205} and negotiations for an international treaty to deal with semiconductor chip topographies are still underway.\footnote{206} Moreover, the sui generis design bills currently before Congress would seem to provide copyright-like protection of functional designs without regard to their aesthetic content and without requiring either objective novelty or nonobviousness as conditions of eligibility.\footnote{207}

Against this background, the federal judiciary's traditional concern to limit the functionality of patented designs may be viewed as an unwillingness to countenance the protection of utility models in disguise without an express congressional mandate to this effect.\footnote{208} On the one hand, too

\footnote{202. Copyright, Designs and Patents Act, 1988 [United Kingdom], ch. 48, §§ 213-264; see, e.g., \textit{R. Merkin}, supra note 3, at 297-98; W.R. Cornish, \textit{Intellectual Property: Patents, Copyrights, Trademarks and Allied Rights} 384-91 (2d ed. 1989); Fellner, \textit{New U.K. Law}, supra note 46. The precise level of "originality" to be required under this law has reportedly been left to the determination of courts. \textit{Id. See also infra notes 846, 947-63 and accompanying text. Before the passage of this Act, British courts protected three-dimensional functional designs in copyright law if they had been depicted in two-dimensional technical drawings, a practice overruled by the Act. See, e.g., \textit{R. Merkin}, supra note 3, at 283-95, 361.}


\footnote{204. \textit{See id.} § 902(b) (excluding nonoriginal and commonplace chip designs and nonoriginal variations of such designs).}


\footnote{207. \textit{See infra note 771} (listing and discussing current design bills); \textit{Brown, supra note 32, at 1399-1400} (criticizing this proposed extension of design protection to functional designs).}

\footnote{208. For evidence that resistance to utility models in disguise may have influenced the development of the nonobviousness standard even with regard to utility patents, see M. Farell, The Supreme Court and the Utility Model Test of Patentability (Apr. 10, 1990) (unpublished paper on file at the Vanderbilt Law School).}
indulgent a standard of functionality might mean that competitors could not make use of a patented design component they needed in order to match or improve upon an originator's performance, efficiency, or manufacturing costs. On the other hand, too stringent a standard would defeat the very purpose of a law enacted to protect ornamental designs of useful articles.

The problem, as Nimetz framed it in 1965, was that "the configurations of most goods are guided both by mechanical necessity and by artistic considerations." Moreover, configurations eligible for protection under the design patent law tend to exhibit a much higher degree of functionality than courts normally expect to encounter in cases dealing with copyrightable "pictorial, graphic, and sculptural works." Were the Court of Appeals for the Federal Circuit to adopt a purist attitude concerning aesthetic features worthy of protection in design patent law, its functionality standard would logically have to invalidate the bulk of the very designs that its evenhanded standard of nonobviousness had just rehabilitated.

Wholesale invalidation on grounds of functionality, in turn, would only intensify the pressures that industrial design had begun to exert on federal unfair competition law in the 1980s, a development the court was well aware of.

During the transitional period under review, the Federal Circuit struggled with this problem without elaborating a fully coherent doctrinal framework for resolving it. On the positive side, the court declared that utility and design patents constituted two different species, serving different but equally valid statutory goals, that were quite capable of peaceful co-existence when the occasion so required. That the Federal Circuit was prepared to tolerate a denser admixture of functional features in patentable designs than the federal appellate courts had condoned in the past then appeared from decisions upholding the designs of an eyeglass display

209. See, e.g., Fryer, supra note 77, at 120; supra note 191 and accompanying text.
210. The term "ornamental" as a requirement was added to the design patent statute in 1902 in order to guide and restrict previous practice. See, e.g., Fryer, supra note 77, at 119-20.
211. Nimetz, supra note 69, at 117; see also Denicola, supra note 194, at 738-40.
212. See, e.g., 17 U.S.C. § 101 (1988) (defining pictorial, graphic, and sculptural works to exclude "their mechanical or utilitarian aspects"); id. § 102(b) (listing nonprotectible matter, especially ideas); id. § 113(b) (excluding protection of three-dimensional useful articles depicted in two-dimensional form). See generally 1 P. Goldstein, supra note 28, at 98-112.
213. See supra text accompanying notes 177-90.
214. See infra text accompanying notes 530-71, 608-701.
216. See, e.g., Shelcore, Inc. v. Durham Indus., Inc., 745 F.2d 621, 628 (Fed. Cir. 1984); Carman Indus., Inc. v. Wahl, 724 F.2d 932, 939 (Fed. Cir. 1983); see also P. Rosen­berg, supra note 77, § 6.01[5], at 6-28.
217. See generally Nimetz, supra note 69, at 113-21.
rack,\textsuperscript{218} of fiberglass camper shells,\textsuperscript{219} and, early in 1986, of a container for dispensing liquids.\textsuperscript{220}

On the negative side, the Federal Circuit skirted the issue of functionality in one difficult case by tacitly linking it with the general tests of nonobviousness. In \textit{Petersen Manufacturing Co. v. Central Purchasing, Inc.},\textsuperscript{221} the court hinted at one point that the design of a handtool was functionally dictated,\textsuperscript{222} while at another point it stressed plaintiff's failure to prove that commercial success stemmed from ornamental features of the patented design rather than from its unpatented functional features.\textsuperscript{223} In the end, the court invalidated the design for obviousness\textsuperscript{224} under the "skilled designer" test of \textit{In re Nalbandian},\textsuperscript{225} and it cast a wanton glance in passing at design bills that seek to protect functional designs without requiring either ornamentality or a creative contribution.\textsuperscript{226}

The \textit{Petersen} decision was regressive in spirit and inconsistent with the court's overall approach. It failed to rationalize a doctrine of functionality that would enable the practicing bar to operate efficiently within a regime willing to tolerate a high degree of functionality in other designs upheld in the same period.\textsuperscript{227} It also opened the door to sub rosa invalidation for

\textsuperscript{218}. \textit{See} \textit{Trans-World Mfg. Corp. v. AI Nyman & Sons, Inc.}, 750 F.2d 1552 (Fed. Cir. 1984) (affirming validity of design for eyeglass display rack).


\textsuperscript{220}. \textit{See} \textit{Unette Corp. v. Unit Pack Co.}, 785 F.2d 1026 (Fed. Cir. 1986) (valid below; issue of validity not raised on appeal).

\textsuperscript{221}. 740 F.2d 1541 (Fed. Cir. 1984).

\textsuperscript{222}. \textit{Petersen}, 740 F.2d at 1549. Handtools are pristine subjects of foreign utility model laws. \textit{See supra} note 198.

\textsuperscript{223}. \textit{Petersen}, 740 F.2d at 1547-49.

\textsuperscript{224}. \textit{Id.}

\textsuperscript{225}. 661 F.2d. 1214 (C.C.P.A. 1981), \textit{cited in Petersen}, 740 F.2d at 1547; \textit{see supra} text accompanying notes 132-40.

\textsuperscript{226}. \textit{See Petersen}, 740 F.2d at 1549 n.7 (referring to Judge Rich's concurring opinion in \textit{Nalbandian}); \textit{infra} note 771 and accompanying text. The \textit{Petersen} court's reference to the then pending design bill thus disclosed that some of the Federal Circuit's most respected judges welcomed the prospects of sui generis protection for functional designs meeting no particular standard of creativity. \textit{See also} \textit{The Industrial Innovation and Technology Act: Hearings on S. 791 Before the Subcomm. on Patents, Copyrights, and Trademarks of the Senate Comm. on the Judiciary, 100th Cong., 1st Sess. 8-31 (1987)} [hereinafter \textit{Design Protection Hearings 1987}] (testimony and statement of Judge Giles S. Rich in favor of such a law). For criticism of these or similar proposals to protect functional designs on soft conditions, see, e.g., Brown, \textit{supra} note 32, at 1395-1404; Cornish, \textit{Protecting the Appearance of Products: A British Experiment}, in \textit{ALAI 1983}, \textit{supra} note 8, at 297-311; \textit{infra} text accompanying notes 769-80.

\textsuperscript{227}. \textit{See supra} notes 218-19 and accompanying text. The confusion surrounding functionality at this time can be surmised from \textit{Feuling v. Wood}, Appeal Nos. 84-543, 84-662 (Fed. Cir. Nov. 30, 1984) (LEXIS, Genfed library, USApp file) (unpublished), \textit{cert. denied}, 471 U.S. 1137 (1985). Since the \textit{Feuling} designs were in effect engine parts
obviousness by district courts concerned about functionality, a favorite tactic of the past, and this in turn might be construed as a signal of hostility or indifference to design patents in general.

In retrospect, the methodological inelegance of *Petersen* was a temporary aberration that did not prevent the Federal Circuit from maintaining a fairly tolerant approach to functionality throughout the transitional period under review. Of eight cases concerning the validity of design patents known to have reached the court between 1982 and the first quarter of 1986, only one was actually invalidated for functionality, while the only design invalidated for obviousness in the same period—i.e., the *Petersen* design of a handtool—was, by the court's own admission, too functional to pass muster. If, in short, the Court of Appeals for the Federal Circuit remained perturbed by functionality (an issue it would soon address more comprehensively), it was not disposed to encourage wholesale invalidation of design patents on this or any other ground during the period under review.

d. Infringement—The New Outcard

The Federal Circuit's ambivalent view of design patents surfaced most clearly in cases that reached the issue of infringement. The usual test for infringement, handed down from *Gorham Manufacturing Co. v. White*, required the accused design to bear such similarities to the protected design as to deceive an ordinary observer into purchasing the former supposing it to be the latter. This emphasis on elements of confusion or deception, which distorts some foreign design laws, too, does prevent second comers from blatantly trading on the goodwill associated with a protected design. But it blunts judicial sensitivity to potential violations of a property right, it

and "irredeemably functional," see Thompson, *supra* note 96, at 191, invalidation by the Federal Circuit was logical; the mystery is why the PTO had issued a design patent in the first place. *Id.*

228. See *supra* note 191 and accompanying text.


230. See *supra* text accompanying notes 216-20.

231. *Feuling v. Wood*, Appeal Nos. 84-543, 84-662 (Fed. Cir. Nov. 30, 1984) (unpublished). For the more traditional attitude of some federal appellate courts still handling patent cases in this period, see, e.g., *Kwik-Site Corp. v. Clear View Mfg. Co.,* 758 F.2d 167, 172, 173-77 (6th Cir. 1985) (see-through mounts for rifle sights found valid and infringed below; two of three designs reversed for functionality on appeal); *Cardiac Pacemakers, Inc. v. Coratomis, Inc.,* 702 F.2d 671, 672 (8th Cir. 1983) (affirming the finding that design for surgically implantable heart pacemakers was invalid for obviousness and functionality).


233. See *infra* text accompanying notes 269-302.

234. 81 U.S. (14 Wall.) 511 (1871).

235. *Id.* at 526-28; *see also* 1 D. CHISUM, *supra* note 3, § 1.04[4].

236. *See, e.g.,* Gaubiac, *Autres Problemes de Frontieres, in LES DESSINS ET MODELES EN QUESTION, supra* note 8, at 57, 87-94 (noting influence of French unfair competition law on tests for infringement under French design protection law).
undermines the protection of design concepts as such, and it encourages the courts to disregard market interests despite the high transaction costs that creators must defray. In effect, this infusion of principles drawn from unfair competition law benefits competitors who appropriate the commercially valuable features of patented designs while artfully varying them to avoid slavish imitation.

The Court of Appeals for the Federal Circuit, which applied the Gorham test unswervingly in this period, did not hesitate to exploit its ambiguities by allowing modest dissimilarities to avoid liability when the judges felt little inclined to enforce the patent at hand. Nor was a showing of commercial success certain to neutralize this predilection for dissimilarities, although proof of copying could attenuate it. Conceding only that Gorham did not impose a “likelihood of confusion” standard like that used in the proliferation of cases in which commercial designs were protected as “appearance trade dress,” the Federal Circuit in this period left more design patents stamped “valid but not infringed” than were found “valid and infringed.”

At the same time, the court took pains to develop and refine a second prong of its infringement doctrine, known as the “point of novelty” test,
which focused on the nature of the matter that a defendant had appropriated as distinct from the issue of similarity.246 Under the "point of novelty" test, a plaintiff must show that any actionable similarities pertain to the novel matter claimed to distinguish the patented design from the prior art.247 When the sole point of similarity is not a novel feature that bore on the threshold claims to eligibility in the first instance, no basis exists for a finding of infringement.248

The point of novelty test enabled the Federal Circuit to probe two issues that lie on opposite sides of the same coin. One concerns the protectability of the matter allegedly taken from the plaintiff's design; the other asks whether the similarities shown to exist actually amount to illicit similarities at all.249 Combining these inquiries permits defendants to excuse even a showing of strong similarities by demonstrating the extent to which they borrowed only commonplace or generic ideas, functional features, or other nonprotectable matter while adding sufficient dissimilarities and variations of their own within the range of otherwise protectable matter.250 These tests provided, in short, a functional equivalent in design patent law of the bifurcated test of copyright infringement251 that the Second, Seventh, and Ninth Circuits had been forging during much of the same period.252

The elaboration of this two-pronged test of infringement plays a critical role in the new approach to design protection law that the Court of Appeals for the Federal Circuit has begun to develop. If the series of "valid but not infringed" decisions prominent in this period reflected nothing more than the old bias against design patents,253 for example, it would fail to explain why the court took such pains to develop the "point of novelty" doctrine

246. See, e.g., Unette, 785 F.2d at 1028-29; Litton, 728 F.2d at 1444.
247. See, e.g., Litton, 728 F.2d at 1444; see also 1 D. CHISUM, supra note 3, § 1.04[4] (noting that "the similarity to the ordinary observer must be attributable to the novel elements of the patented design").
248. See, e.g., 1 P. ROSENBERG, supra note 77, § 6.01[5], at 6-36.
249. See, e.g., Unette, 785 F.2d at 1028-29; Litton, 728 F.2d at 1440.
250. See, e.g., Litton, 728 F.2d at 1440. For more recent cases, see infra notes 303-18 and accompanying text.
252. See, e.g., Thompson, supra note 96, at 195 (noting affinities to copyright infringement in Fiberglass in Motion).
253. See, e.g., Cooling Sys. & Flexibles, Inc. v. Stuart Radiator, Inc., 777 F.2d 485, 491-93 (9th Cir. 1985); Atari, Inc. v. North Am. Phillips Consumer Elecs. Corp., 672 F.2d 607 (7th Cir.), cert. denied, 459 U.S. 880 (1982); Warner Bros. v. ABC, 720 F.2d 231 (2d Cir. 1983). See generally 2 P. GOLDSTEIN, supra note 28, at 3-45. It must be remembered, however, that copyright law gives no protection against independent creation, whereas independent creation is not a recognized defense to an action for infringement of a design patent, and copying as such need not be shown. See, e.g., Fryer, supra note 77, at 121.
254. See, e.g., Thompson, supra note 96, at 162, 174, 190 (suggesting this explanation).
when the presence of relatively minor differences could justify a finding of noninfringement under the *Gorham* test without more. And why bother to fashion such an elaborate doctrinal outcard at all while avoiding the older and better established outcards of invalidation for obviousness or functionality or both? 255

A more promising line of inquiry is to ascertain why a court that had taken pains to treat industrial designs in a more neutral and evenhanded manner considered the "point of novelty" test to be of such ancillary importance. A review of the cases in which this test figured prominently then suggests that the Federal Circuit found it especially helpful when the patented design combined decorative and very functional features in an integrated whole that enjoyed considerable commercial success. 256 An hypothesis worth examining, in short, is that the ambivalence and uncertainty characterizing the infringement doctrine during this transitional period is directly related to the court's larger, unresolved quandary about functionality. That quandary, 257 in turn, stemmed from the court's growing realization that greater latitude in admitting functionally influenced designs to patent protection was needed under modern economic conditions notwithstanding the federal judiciary's traditional reluctance to allow design patent law to protect utility models in disguise. 258

If the above-mentioned hypothesis proved accurate, then the elaboration of a more refined functionality doctrine—noticeably lacking in this period—could itself allow decisions for or against infringement to assume a more neutral and predictable configuration than was true between 1982 and the first quarter of 1986. The cases decided from mid-1986 to the time of writing appear to verify both of these hypotheses.

3. The New Synthesis: Functionality, Point of Novelty, Illicit Appropriation

The later cases suggest that the Court of Appeals for the Federal Circuit has shed its initial reserve and is systematically fashioning a more workable design protection law on the foundations of the preexisting legislation. Notable in this regard is a more resolute determination to apply all the

255. This does not exclude the possibility that old fashioned antiprotectionist bias was present in such cases as *Unette*, 785 F.2d 1026, and *Shelcore*, 745 F.2d 621, in which the qualitative nature of the similarities at issue may have been unduly discounted. The point is that the search for a workable doctrinal structure to accommodate industrial design fulfilled policy objectives that cannot be explained by the appeal to bias alone.

256. See, e.g., *Unette*, 785 F.2d 1026 (finding design of dispensing container for liquids valid but not infringed); Litton Sys., Inc. v. Whirlpool Corp., 728 F.2d 1423 (Fed. Cir. 1984) (finding design of microwave oven doors valid but not infringed); see infra notes 303-31 and accompanying text (discussing more recent cases).

257. For recognition that the Federal Circuit at this period was in a quandary about functionality, see Fryer, supra note 77, at 120-21.

258. See, e.g., Petersen Mfg. Co., v. Central Purchasing, Inc., 740 F.2d 1541, 1548-49, 1549 n.7 (Fed. Cir. 1984) (holding design of needle-nosed locking plier-type wrench invalid for obviousness, but hinting that the underlying functionality problem might be cured if proposed design legislation were enacted); supra note 226 and accompanying text.
Graham criteria of nonobviousness to industrial designs and the elaboration of an overarching doctrine of functionality that affects every phase of the infringement action. The evidence further suggests that the clearer signals emitted by the Federal Circuit in this period have begun to influence the way federal district courts approach design patent cases, too, even though a statistical analysis to detect trends at the district court level remains premature.259

a. Unreserved Application of Secondary Factors

On the surface, the Federal Circuit's recent pronouncements concerning the statutory presumption of validity and the weight to be given the Graham criteria—including secondary considerations—appear to carry forward the doctrinal framework established during the transitional phase.260 In reality, the court has added a new dimension to its earlier work by stressing the extent to which the patenting of aesthetic achievements promotes progress in industrial design.261 The Federal Circuit has thus jettisoned the antimonopolistic cant employed against design patents for the past twenty years or more,262 and it seems keenly aware of the role that industrial design plays in stimulating competition under modern economic conditions.263

259. Because leading cases that perfect the Federal Circuit's own doctrinal re-elaboration were handed down only in 1988-1990, there is an inevitable time lag during which the lower courts have to register and digest a more refined message. See infra text accompanying notes 270-314.


261. See, e.g., Avia, 853 F.2d at 1563-64 (stressing need to promote the decorative arts as policy of the design statute); Pacific Furniture, 800 F.2d 1111 (cited in Avia as an instance of promoting the decorative arts); cf. Gorham Co. v. White, 81 U.S. (14 Wall.) 511 (1871) (stating that purpose of the statute is "to give encouragement to the decorative arts").

262. See generally Nimetz, supra note 69, at 97-113 (rehearsal of the antipatent bias of the Machlup tradition in the design patent milieu).

263. See, e.g., Lee v. Dayton-Hudson Corp., 838 F.2d 1186, 1188 n.3 (Fed. Cir. 1988) (quoting testimony of Judge Rich deploring that there is "no Federal statute today suited to the needs of designers and design owners"); see also American Antenna Corp. v. Wilson Antenna, Inc., 690 F. Supp. 924, 928 (D. Nev. 1988) (stating that "sleek, high tech appearance" contributed to company's "unique position in the industry" since introducing the patented design); Physio-Control Corp. v. Medical Research Laboratories, 7 U.S.P.Q.2d (BNA) 1497, 1498 (N.D. Ill. 1988) (noting that "a poor design appearance may create doubts about the level of technical skill and attention devoted to the engineering . . . of the device itself"). For the view that "[d]esign is the lifeline of modern commercially progressive industries and its role in international competitiveness is growing significantly," see D. Ughanwa & M. Baker, The Role of Design in International Competitiveness 243, 243-343 (1989); C. Lorenz, The Design Dimension—Product Strategy and the Challenge of Global Marketing 40-47 (1986); see also Gregory, supra note 88, in Les Dessins Et Modeles En Question, supra note 8, at 231-271 (stating that in "a society based on consumption, the primacy of desire over need has given to form a preeminence that it never previously attained outside of the most socially privileged groups"). For the view that intellectual property rights
With these policies in mind, the court has allowed the secondary considerations, including commercial success and copying, their full weight in the assessment of validity throughout the period under review.\textsuperscript{264} Although it insists on proof of a nexus between commercial success and the claimed design innovation,\textsuperscript{265} the Federal Circuit has applied these objective tests in a manner consistent with its treatment of utility patents\textsuperscript{266} and without the guarded restraint that characterized the transitional period.\textsuperscript{267} At the same time, the court has shaped the motion for summary judgment into a tool that lower courts can be expected to use more liberally when determining issues of either validity or infringement in design patent cases.\textsuperscript{268}

\textbf{b. Nonfunctionality as a “Multiplicity of Forms”}

In more recent decisions, the Court of Appeals for the Federal Circuit has managed to combine its flexible treatment of nonobviousness with a mature doctrine of functionality premised on the net separation of the two issues. As a result, the court will normally not allow considerations of functionality to influence the test of nonobviousness,\textsuperscript{269} a practice that had sometimes clouded its elaboration of both doctrines during the transitional phase.\textsuperscript{270}


\textsuperscript{264} See, e.g., Avia, 853 F.2d at 1564; Pacific Furniture, 800 F.2d at 1114 (commercial success and copying stressed in lower court's finding of validity; Federal Circuit affirmed, allowing treble damages and praising the lower court's reasoning).

\textsuperscript{265} See, e.g., Avia, 853 F.2d at 1564 (holding that proof of nexus in regard to commercial success was demonstrated); Neo-Art, Inc. v. Hawkeye Distilled Prods. Co., 12 U.S.P.Q.2d (BNA) 1572 (Fed. Cir. 1989) (unpublished) (finding that commercial success of patented liquid dispenser derived from novel use, not from protectible design features, and rejecting first to promote theory); see also Benchcraft, Inc. v. Broyhill Furniture Indus., Inc., 681 F. Supp. 1190, 1203-07 (N.D. Miss. 1988) (holding that nexus between “overall design, standing alone” and commercial success was not demonstrated, but copying of design by at least eighteen other furniture manufacturers was “quite persuasive” of nonobviousness), rev’d on other grounds, 10 U.S.P.Q.2d (BNA) 2036 (Fed. Cir. 1989) (unpublished).

\textsuperscript{266} See, e.g., Avia, 853 F.2d at 1563-65 (applying texts of commercial success and copying, stating that “[d]esign patents must meet a nonobvious requirement identical to that applicable to utility patents”); see also American Antenna Corp. v. Wilson Antenna, Inc., 690 F. Supp. 924, 928 (D. Nev. 1988) (holding that acquiescence of the trade helped to show that “high tech” design was not obvious).

\textsuperscript{267} Compare, e.g., Avia, 853 F.2d 1557 and Pacific Furniture, 800 F.2d 1111 with Litton Sys. Inc. v. Whirlpool Corp., 728 F.2d 1423 (Fed. Cir. 1984).

\textsuperscript{268} See Avia, 853 F.2d at 1560-61 (discussing summary judgment).

\textsuperscript{269} See, e.g., Avia, 853 F.2d at 1563; Lee v. Dayton-Hudson Corp., 838 F.2d 1186 (Fed. Cir. 1988); In re Cho, 813 F.2d 378, 382 (Fed. Cir. 1987); Power Controls Corp. v. Hybrinetics, Inc., 806 F.2d 234, 239 (Fed. Cir. 1986). \textit{But see} Neo-Art, Inc. v. Hawkeye Distilled Prods. Co., 12 U.S.P.Q.2d (BNA) 1572 (Fed. Cir. 1989) (unpublished) (invalidating the design of a liquid dispenser because its overall appearance was "suggested by the combination of references considered by the [lower] court").

\textsuperscript{270} See \textit{supra} notes 221-30 and accompanying text.
Perhaps to ensure that lower courts and the examiners respect the Federal Circuit's resolve in this regard, a majority in In re Cho reversed the PTO's decision that the design of a bottlecap was obvious because the Board had erroneously analyzed the cap as if it were the subject of an application for a utility patent. Although "it may have been obvious from a utility standpoint to place cylindrical depressions in crown-type caps and to include flaps in the depressions," the majority declared, it did not follow that the claimed design was obvious because "the combined teachings suggest only components of the claimed design . . . not its overall appearance." A dissenting opinion would have affirmed the examiner's rejection on grounds of functionality, but the majority pointedly refused to consider the functionality bar as "not an issue in this appeal." That the court would henceforth treat nonobviousness and functionality as separate and independent issues was thus a message it carried up to and perhaps beyond the breaking point in this opinion.

This gambit served to flush the problem of functionality out into the open where the Federal Circuit now proceeded to deal with it on its own terms. At one extreme, the court showed it would not hesitate to exclude all designs that are dictated by function, in keeping with the older case law. At the opposite extreme, the court foresaw that purely decorative designs, altogether separable from the functional features of the products that embodied them, would pose no problem. It recognized nonetheless that most cases fell between these extremes because functional considerations significantly affect the bulk of the designs that figured in litigation today.

If the commercially most valuable designs that are both efficient and attractive were to be denied eligibility merely because of their functional com-

271. 813 F.2d 378 (Fed. Cir. 1987).
272. Id. at 382; see also Lee, 838 F.2d at 1188 (separating tests of functionality and ornamentality).
273. Cho, 813 F.2d at 382.
274. Id. at 382-84 (Newman, J., dissenting).
275. Id. at 382.
276. See, e.g., Fryer, supra note 77, at 120-21 (criticizing the detachment of ornamentality from functionality in the majority's analysis). The dissent preferred that the analysis of ornamentality and obviousness should be guided by the same criterion. See Cho, 813 F.2d at 382; see also Neo-Art, Inc. v. Hawkeye Distilled Prods. Co., 12 U.S.P.Q.2d (BNA) 1572 (Fed. Cir. 1989) (unpublished) (apparently adopting this approach and, to that extent, is regressive in method and spirit). The whole point of the cases from mid-1986 on was to enable more functionality to enter design patent law at the eligibility stage while establishing some means of filtering out functional features at the infringement stage. See infra text accompanying notes 303-31.
277. See, e.g., Power Controls Corp. v. Hybrinetics, Inc., 806 F.2d 234 (Fed. Cir. 1986) (finding that packaging for electrical component was functional).
278. See, e.g., Lee v. Dayton-Hudson Corp., 838 F.2d 1186, 1188 (Fed. Cir. 1988) (stressing that design patents are limited to ornamentation); Power Controls, 806 F.2d at 239 (finding that design for plastic "clam shell" casing for electrical rotary dimmer switch was not primarily ornamental).
280. See, e.g., Fryer, supra note 77, at 120.
ponents, the old doctrinal formula barring functionally dictated designs\(^{281}\) could become an instrument for depriving the design patent law of any stimu-
latory effect in the drive for domestic economic growth.\(^{282}\) In a formative opinion handed down in *Avia Group International v. L.A. Gear California, Inc.*,\(^{283}\) the Federal Circuit demonstrated the liberality with which it would allow designs that combined functional and aesthetic fea-
tures to survive the threshold tests of eligibility.\(^{284}\) In so doing, the court turned away from rigid tests of separability that seek to distinguish form and function, with their built-in bias towards nineteenth century kitsch,\(^{285}\) in favor of a “multiplicity of forms” approach\(^{286}\) familiar from foreign design law.\(^{287}\) Under this approach, a given design feature, though functionally signifi-
cant, need not be excluded if competitors can obtain comparable tech-
nical yields by using an aesthetically different shape.\(^{288}\) Only a design fea-
ture that failed this test would automatically be barred at the threshold of eli-
gibility, lest design patent law allow a manufacturer to control important mechanical functions\(^{289}\) or perhaps to monopolize features determined by market expectations.\(^{290}\)

This left a gray area in which the “multiplicity of forms” test would not of itself invalidate a functional design that also embodied strong aesthetic

\(^{281}\) See, e.g., 1 D. Chisum, *supra* note 3, § 1.04[2], at 1-192 to 1-194.1 (citing authorities).

\(^{282}\) See, e.g., *Avia*, 853 F.2d at 1563 (stressing distinction between functionality of article and “functionality of the particular design of such article or features thereof that perform a function”).

\(^{283}\) 853 F.2d 1557 (Fed. Cir. 1988).

\(^{284}\) See, e.g., *Avia*, 853 F.2d at 1563; see also *Lee v. Dayton-Hudson Corp.*, 838 F.2d 1186, 1188 (Fed. Cir. 1988) (stating that patentable design may embody functional features); Phlaphongphanich v. Fabjancic, No. 88-1128 (Fed. Cir. June 17, 1988) (LEXIS, Genfed library, USApp file) (unpublished) (stating that “design patents may in some cases embody functional features”).

\(^{285}\) See, e.g., *Nimet*, *supra* note 69, at 120 (criticizing “gingerbread conception of design”).

\(^{286}\) See, e.g., *Avia*, 853 F.2d at 1563; see also *Lee*, 838 F.2d at 1188.

\(^{287}\) See, e.g., Gaubiac, *supra* note 236, at 66-71 (noting increasing use of “multiplicity of forms” test in regard to functionality under French design protection law); *infra* note 288 (discussing U.K. law).

\(^{288}\) See, e.g., *Avia*, 853 F.2d at 1563; see also *Fryer, supra* note 77, at 120; *Nimet*, *supra* note 69, at 120 (arguing, in 1965, that “such a test would make good economic sense”). Strictly applied, however, a “multiplicity of forms” test can become overprotective on the premise that there is no useful article whose “demands . . . are such that only one design will suffice to meet them.” See R. Merkin, *supra* note 3, at 292 (discussing decision by United Kingdom’s House of Lords in *AMP v. Utilux*, [1972] RPC 103 (H.L.).

\(^{289}\) See, e.g., Power Controls Corp. v. Hybrinetics, Inc., 806 F.2d 234, 240 (Fed. Cir. 1986) (concerning plastic packaging container devised to close like a clam shell around electrical elements). According to Professor Fryer, there was no evidence that this design improved appearance or that “the package could be built using the same functional arrangement without creating essentially the same appearance.” *Fryer, supra* note 77, at 120.

\(^{290}\) See, e.g., *Litton Sys., Inc. v. Whirlpool Corp.*, 728 F.2d 1423, 1443 (Fed. Cir. 1984) (holding that microwave oven door shared features in common with all prior oven doors).
components. Methodologically, the Federal Circuit believed it could isolate the pertinent aesthetic features in such cases by piecemeal decomposition of the design as a whole, a technique the court expressly authorized the lower courts to use for purposes of its refined functionality analysis, but not for purposes of testing either obviousness or infringement. When this analysis persuades the district courts that a given design as a whole amounts to a utility model in disguise, they should invoke the "primarily functional" rule to invalidate it, in part because such designs "do not promote the decorative arts." But the Federal Circuit will not allow the rule against primarily functional designs to exclude a priori all the heavily functional designs falling within this gray area as might have occurred in the past. On the contrary, when functional features are combined with strongly marked aesthetic features, as often occurs, and the design as a whole does not fail the "multiplicity of forms" criterion, the Federal Circuit may allow it to survive the functionality hurdle in order to evaluate the nature of the taking under the two-pronged test for infringement it has carefully elaborated.

It follows that "design patents may in some cases embody functional features," precisely because—as one federal district court recently deduced—"we are concerned not with ornamentation in the conventional sense, but with industrial design." In this environment, the Federal Cir-

291. See, e.g., Avia, 853 F.2d at 1563; Power Controls, 806 F.2d at 239-40.
292. See, e.g., Avia, 853 F.2d at 1563; In re Cho, 813 F.2d 378, 382 (Fed. Cir. 1987).
293. See, e.g., Power Controls, 806 F.2d at 240.
294. See supra text accompanying notes 196-200, 208.
295. See, e.g., Power Controls, 806 F.2d at 240 (holding plastic "clam shell" package to encase electrical rotary dimmer switch invalid for functionality); see also Lee v. Dayton-Hudson Corp., 838 F.2d 1189 (Fed. Cir. 1988) (affirming validity of design for massage device, "but a design patent is not a substitute for a utility patent"); supra note 185.
296. See Power Controls, 806 F.2d at 238 (citing In re Carletti, 328 F.2d 1020, 1022 (C.C.P.A. 1964)).
297. See supra note 100 and accompanying text; see also 1 D. CHISUM, supra note 3, § 1.04[2], at 1-194.1 to 1-195.
298. See, e.g., Avia Group Int'l v. L.A. Gear Cal., Inc., 853 F.2d 1557, 1563 (Fed. Cir. 1988) (finding that overall aesthetic design of an athletic shoe was not functional, although parts of the design were functional, because each component could have been accomplished in other ways).
299. See, e.g., id. at 1563 (affirming the summary judgment finding that design for upper part and outer sole of athletic shoe was valid and infringed); Lee, 838 F.2d at 1188 (affirming the finding that design for massage device was valid); see also FMC Corp. v. Hennessy Indus., Inc., 836 F.2d 521, 528 (Fed. Cir. 1987) (affirming the finding that design of full-power, single-power-source changer for tubeless tires was valid). For the most recent decision, see Winner Int'l Corp. v. Wolo Mfg. Corp., 905 F.2d 375 (Fed. Cir. 1990) (finding design of steering wheel lock was not infringed under point of novelty test, and vacating finding of invalidity). The Lee and FMC decisions portend the excesses to which the "multiplicity of forms" test can be carried unless checked by other doctrines. See supra note 288; infra note 321 and accompanying text.
301. Physio-Control Corp. v. Medical Research Laboratories, 7 U.S.P.Q.2d (BNA) 1497,
circuit warned, courts must either learn to distinguish the functionality of an article from the functionality of a particular design or it will "not be possible to obtain a design patent on a utilitarian article of manufacture."302

c. Relation Between Functionality and Infringement

The price exacted for this liberality at the threshold to eligibility, however, is a stricter scrutiny at the infringement stage than the Federal Circuit would otherwise require if the design were less significantly influenced by functional features. This heightened scrutiny occurs along both edges of the two-pronged approach to infringement formulated during the transitional period.303

From one angle, the Federal Circuit applies the "point of novelty" test, rather like the idea-expression test of copyright law, to exclude nonpatentable features, including the prior art,304 and to focus the ordinary purchaser's attention on protectable aesthetic components of a patented design.305

1498 (N.D. Ill. 1988). Noting the "clean and crisp" appearance given by the design of a defibrillator used in cardiac arrest emergencies, the district court observed that while "very little of it is dictated solely by function . . . the design options are clearly inhibited by function" in an effort to "enhance . . . effectiveness . . . and at the same time present a pleasing appearance." Id. at 1498; see also American Antenna Corp. v. Wilson Antenna, Inc., 690 F. Supp. 924 (D. Nev. 1988) (holding that unlike alleged prior art, patented device had "sleek, high tech appearance" and that claim of validity was likely to succeed on the merits).

302. Avja, 853 F.2d at 156 (citing Pacific Furniture Mfg. Co. v. Preview Furniture Corp., 800 F.2d 1111 (Fed. Cir. 1986); Carman Indus., Inc. v. Wahl, 724 F.2d 932, 939 (Fed. Cir. 1983)); see supra note 282. The end result in these cases approximates that of recent decisions in the United Kingdom. There the notion that a design is to be excluded if dictated by function has come to mean that it was "prompted by a given purpose" without an attempt to add some embellishment to the article beyond those features prompted by the purely functional demands of the article. See R. Merkin, supra note 3, at 292-94 (discussing Interlego AG v. Tyco Indus., [1988] 3 All E.R. 949; AMP v. Utilux, [1972] RPC 103 (H.L.)).

303. See supra notes 246-58 and accompanying text.

304. See supra text accompanying notes 249-53. "A device that copies the utilitarian or functional features of a patented design is not an infringement unless the ornamental aspects are also copied . . . ." Lee v. Dayton-Hudson Corp., 838 F.2d 1186, 1189 (Fed. Cir. 1988); see also Winner Int'l Corp. v. Wolo Mfg. Corp., 905 F.2d 375 (Fed. Cir. 1990).

305. See, e.g., Winner, 905 F.2d at 376; Avja, 853 F.2d at 1565; Lee, 838 F.2d 1186; FMC Corp. v. Hennessy Indus., Inc., 836 F.2d 521, 527 (Fed. Cir. 1987); see also Unette Corp. v. Unit Pack Co., 785 F.2d 1026, 1028 (Fed. Cir. 1986); Litton Sys., Inc. v. Whirlpool Corp., 728 F.2d 1423, 1444 (Fed. Cir. 1984) (cited with approval in this connection by FMC). In Lee, a panel of the court suggested that the "point of novelty" test applied only if the Gorham test of similarity as a whole was met. Lee, 838 F.2d at 1189. This seems unnecessarily rigid, given that patent law, unlike copyright law, requires prior specificity of claims. See, e.g., Winner, 905 F.2d at 376 (stating that purpose of point of novelty test is "to focus on those aspects . . . which render the design different from prior art designs"); cf. Adelman & Francione, The Doctrine of Equivalents in Patent Law: Questions that Pennwalt Did Not Answer, 137 U. Pa. L. Rev. 673, 705-06 (1989). While commentators have criticized the Federal Circuit's recent tendency to import the copyright principle of substantial similarity into the doctrine of
This ensures that the broadened mix of decorative and utilitarian features allowed to escape invalidation under the court's more relaxed tests of functionality and nonobviousness will not indiscriminately obtain protection through the back door in the infringement calculus.\textsuperscript{306}

From a second angle, the Federal Circuit seems likely to circumscribe the range of actionable similarities when applying the ordinary purchaser test of \textit{Gorham Co. v. White}\textsuperscript{307} to highly functional designs that have not been copied point for point. In such cases, the court will first satisfy itself that the similarities claimed to infringe constitute illicit similarities—that is, an appropriation of the patented novelty\textsuperscript{308}—because a competitor does not infringe by copying unprotectable functional features.\textsuperscript{309} The presence of very functional features can then affect the degree of similarity that may be required to trigger infringement in either quantitative or qualitative terms. By demanding closer imitation within a narrower range of equivalents than would be necessary absent these functional influences, the Federal Circuit further ensures that only imitators who appropriate more than the unprotectable features will fall into the net of infringement.\textsuperscript{310}

In sum, when the patented design partakes of highly functional elements and a second comer invests the time and expense to vary it, the court may weigh his variations more favorably than if the patentee had claimed markedly aesthetic or decorative effects.\textsuperscript{311} The more a given design elicits strict scrutiny on account of its functionality, the less its actionable similarities are likely to "deceive" the ordinary purchaser in the court's view.\textsuperscript{312}

\textsuperscript{306} See, e.g., Winner, 905 F.2d at 376 (stating that the point of novelty test cannot include the overall configuration and appearance of a patented design "without regard to the prior art"); Lee, 838 F.2d at 1188 (holding that design patents protect only ornamental features, not structural or functional aspects).

\textsuperscript{307} 81 U.S. (14 Wall.) 511 (1871).

\textsuperscript{308} See, e.g., Winner, 905 F.2d at 376; FMC, 836 F.2d at 527.

\textsuperscript{309} See, e.g., Avia, 853 F.2d at 1565; Lee, 838 F.2d at 1190; FMC, 836 F.2d at 527. In short, there must be an illicit appropriation of the patentable novelty, not just an appropriation of the patented design. For an analogous approach in copyright law, see \textit{supra} note 253.

\textsuperscript{310} See, e.g., Lee, 838 F.2d at 1190; FMC, 836 F.2d at 527-28.

\textsuperscript{311} See \textit{Winner}, 905 F.2d 375 (holding that no reasonable jury could find design of steering wheel lock infringed because of dissimilarities and defendant's use of unpatented prior art); see also \textit{Lee}, 838 F.2d at 1190 (acknowledging that doctrine of equivalents applies to design patents, lest minor differences camouflage piracy; but noting that the doctrine can only apply where the designs are "equivalent in their ornamental, not functional aspects," and holding design for a massage device valid but not infringed); \textit{FMC}, 836 F.2d at 527-28 (assessing both differences and similarities, but finding that the former prevailed, despite defendant's intention to market "look-alike" product design for tubeless tire changer; design patent held valid but not infringed).

\textsuperscript{312} See, e.g., \textit{FMC}, 836 F.2d at 527-28; see also \textit{Physio-Control Corp. v. Medical Research}}
But when a second comer is too lazy or in too much of a hurry to make any appreciable variations, his copy will infringe notwithstanding the presence of strong functional features in the overall design.\footnote{313} In this event, even though the imitator intended to exploit a different market segment and did not engage in direct competition with the originator, he will nonetheless infringe upon the protected design concept.\footnote{314}

The Court of Appeals for the Federal Circuit has thus responded to criticism concerning the failure of design patent law to recognize the doctrine of equivalents\footnote{315} by indicating that the scope of protection may extend beyond literal infringement in appropriate cases,\footnote{316} even though the range of protectable equivalents will shrink as the incidence of functionality increases.\footnote{317} Should this willingness to protect the patented design concept carry over to future decisions, it could eventually limit the deception rationale of \textit{Gorham}\footnote{318} and further enhance the overall effectiveness of the existing design protection law.

4. Positive Evaluation of Current Law

The foregoing survey of major cases handed down between the second quarter of 1986 and the second quarter of 1990 has confirmed that a broad range of highly functional designs may now qualify for patent protection, even if the Court of Appeals for the Federal Circuit rightly continues to stress that "[t]he great bulk of industrial design is simply not protectable by design patents."\footnote{319} As regards the substantive prerequisite of nonobviousness, the cases show that eligible designers usually benefit from the

\footnote{313} See, e.g., \textit{Avia}, 853 F.2d at 1565 (finding that design of parts of an athletic shoe was valid and infringed); \textit{see also} Pacific Furniture Mfg. Co. v. Preview Furniture Corp., 800 F.2d 1111, 1114 (Fed. Cir. 1986) (finding that design for upholstered armchairs was valid and willfully infringed).

\footnote{314} See, e.g., \textit{Avia}, 853 F.2d at 1565.

\footnote{315} See, e.g., Thompson, \textit{supra} note 96, at 162. For the unsettled state of the doctrine of equivalents in regard to utility patents after \textit{Pennwalt Corp. v. Durand-Wayland, Inc.}, 833 F.2d 931 (Fed. Cir. 1987) (en banc), see generally Adelman & Francione, \textit{supra} note 305.

\footnote{316} See, e.g., \textit{Avia}, 853 F.2d at 1565 ("To find infringement, the accused shoes need only appropriate a patentee's protected design, not a patentee's market as well."); \textit{Lee v. Dayton-Hudson Corp.}, 838 F.2d 1186, 1189-90 (Fed. Cir. 1988) (stating that "principles of equivalency are applicable under \textit{Gorham}").

\footnote{317} See \textit{supra} notes 311-14 and accompanying text.

\footnote{318} See \textit{supra} notes 234-39 and accompanying text.

\footnote{319} \textit{Lee}, 838 F.2d at 1188 n.3. The reasons for this general condition of nonprotectability are twofold: (1) most industrial designs are primarily functional and therefore not within the purview of a statute that covers "ornamental designs of useful articles"; and (2) most industrial designs are legally obvious by definition. In evaluating the state of design protection law both here and abroad, it is important to keep these two issues separate. See \textit{infra} text accompanying notes 947-69.
presumption of validity once their patents have issued and from the application of secondary or objective factors if validity is later challenged. Because the protection of markedly aesthetic designs better promotes the policies underlying the statute than the protection of very functional appearance designs, the former tend to receive more favorable treatment at the infringement stage when courts evaluate the nature of the taking. Alleged infringers of highly functional designs must still approach slavish imitation before incurring liability, lest the design patent law cover a range of equivalents that would unduly encroach upon the delicate frontier with utility patents.\(^\text{320}\)

Despite these limitations, the cases emanating from the Federal Circuit reveal an impressive effort to reshape the United States Design Patent Act in conformity with its original goals. To be sure, a number of issues require further elaboration, especially the "multiplicity of forms" test of functionality, whose innate permissiveness has been judicially curtailed in both the United Kingdom and France.\(^\text{321}\) Much also depends on the court's continued willingness to emit the clearer signals it has been sending since 1986 and on the continuation of a favorable climate for utility patents as well.\(^\text{322}\) But none of these reservations detracts from the remarkable finding that, of thirteen cases concerning ornamental designs of useful articles known to have reached the Federal Circuit during the period under review,\(^\text{323}\) there

\(^{320}\) See supra text accompanying notes 303-18; see also Chrysler Motors Corp. v. Auto Body Panels of Ohio, Inc., 908 F.2d 951 (Fed. Cir. 1990) (affirming denial of preliminary injunction on theory that presumption of validity had been sufficiently rebutted, especially in regard to functionality; issue on merits "not prejudiced").

\(^{321}\) See, e.g., supra notes 299, 302. Even under the United Kingdom's Registered Designs Act of 1949 as amended in 1988, supra note 3, features prompted by functional demands of an article without added embellishment remain ineligible. The pure multiplicity of forms test was rejected as too permissive. R. Merkin, supra note 3, at 292-94; see also Pérot-Morel, Protection of Designs and How It Is Related to the Law on Patents In French Law, in Design Protection, supra note 8, at 67, 70-74 (hereinafter Pérot-Morel, Protection of Designs) (stating that multiplicity of forms test leads to excessive protection under French Design Law of 1909, and that modified separability or "contours" test, adopted by some courts, excludes elements of form that contribute to a practical result); cf. Chrysler Motors, 908 F.2d 951.

\(^{322}\) Cf. Nimetz, supra note 69, at 83. One recent unpublished opinion evokes the old bias against combination designs and sends a methodological signal not in keeping with the Federal Circuit's other decisions. See Neo-Art, Inc. v. Hawkeye Distilled Prods. Co., 12 U.S.P.Q.2d (BNA) 1572 (Fed. Cir. 1989) (invalidating design of container for obviousness because it was "suggested by the combination of references").

are only two decisions invalidating patented designs for obviousness, both unpublished,\textsuperscript{324} and there is only one clear instance of invalidation for functionality.\textsuperscript{325} Moreover, in two of the five cases in which the Federal Circuit applied the refined infringement analysis described above, the patented designs were found both valid and infringed.\textsuperscript{326}

Even when cases from both the transitional and the more mature phases are examined together, the results are hardly less astonishing. Of some twenty-two relevant cases known to have reached the Federal Circuit between 1982 and the first half of 1990, there were only two instances of invalidation for functionality.\textsuperscript{327} Of some eighteen cases in which the inventive height was directly or indirectly challenged, there were only three instances of invalidation for obviousness.\textsuperscript{328} Of some ten relevant cases known to have reached the decisive phase of an infringement action during the entire period under review, four concerned patented designs that were ultimately found valid and infringed.\textsuperscript{329}

\textsuperscript{324} Neo-Art, 12 U.S.P.Q.2d (BNA) 572; Batts, No. 88-1134 (Fed. Cir. Nov. 17, 1988); see supra note 323. Rule 18 opinions designated as unpublished "shall not be employed as precedent" by the Federal Circuit, except in regard to a claim of res judicata, collateral estoppel, or law of the case.

\textsuperscript{325} See Power Controls, 806 F.2d at 238-40. Not included in these statistics is Chrysler Motors Corp. v. Auto Body Panels of Ohio, Inc., 908 F.2d 951 (Fed. Cir. 1990). See supra note 320.

\textsuperscript{326} Compare Avia, 853 F.2d 1557 (holding designs for shoe sole and upper part valid and infringed) and Pacific Furniture, 800 F.2d 1111 (holding design of upholstered armchair valid and infringed) with FMC, 836 F.2d 501 (affirming lower court finding that design of single-power-source tire changer was valid but not infringed in action for declaratory judgment by alleged infringer) and Lee, 838 F.2d 1186 (holding design for massage implement valid but not infringed) and Winner, 905 F.2d 375 (vacating finding of invalidity and holding design of anti-theft bar-type steering wheel lock not infringed under point of novelty test).

\textsuperscript{327} These cases include Power Controls, 806 F.2d 234; Feuling v. Wood, Nos. 84-543, 84-662 (Fed. Cir. Nov. 30, 1984) (LEXIS, Genfed library, USApp file) (unpublished) (finding designs for engine fan housings and mountings to be primarily functional); see supra notes 227, 289; see also supra text accompanying notes 221-28, 276 (discussing Petersen Mfg. Co. v. Central Purchasing, Inc., 740 F.2d 1541 (Fed. Cir. 1984); Neo-Art, 12 U.S.P.Q.2d (BNA) 572 (holding highly functional designs invalid for obviousness). Not included in these statistics is Chrysler Motors, 908 F.2d 951.

\textsuperscript{328} These cases include Petersen, 740 F.2d 1541; Neo-Art, 12 U.S.P.Q.2d (BNA) 572; Batts, No. 88-1134 (Fed. Cir. Nov. 17, 1988). See supra notes 221-28, 323 and accompanying text. Nothing is known about the last case at either level.

To anyone familiar with the dismal record of the past, these findings proclaim an altogether different message. They do not, of course, add up to a modern design protection law along the lines that reformers both here and abroad have sought to develop from the 1950s on.\textsuperscript{330} They do signify a major change of direction in United States design patent law, one that is more consonant with the spirit of the Supreme Court's early decision in \textit{Gorham Co. v. White}. By providing some exceptionally creative designs with a strong and effective form of protection, albeit on strict conditions, the Court of Appeals for the Federal Circuit has brought the domestic design protection law closer to the models operating abroad. In so doing, it has at long last enabled the United States to fulfill the obligation "to protect industrial designs" that article 5 \textit{quinquies} of the Paris Convention imposed on all Member States.\textsuperscript{331}

\section*{B. Copyright Protection of Applied Art: The Retreat from Partial Cumulation}

\subsection*{1. Forty Years After \textit{Mazer v. Stein}: 1954-1983}

Because the federal appellate courts had virtually stopped enforcing issued design patents by the 1950s,\textsuperscript{332} the modern period of design protection in the United States really opened with the landmark case of \textit{Mazer v. Stein}\textsuperscript{333} in 1954, in which the Supreme Court first upheld copyright protection for works of applied art.\textsuperscript{334} Judicial recognition of applied art as statutory subject matter brought domestic law into line with the minimum standards prevailing under the international copyright conventions.\textsuperscript{335} But the Supreme Court neglected to provide any legal criterion for distinguishing commercial designs now eligible for protection as "works of applied art"

\begin{footnotes}
\item[330] See infra text accompanying notes 918-37.
\item[331] See supra notes 33, 109 and accompanying text.
\item[332] See supra notes 72, 108-09 and accompanying text.
\item[333] 347 U.S. 201 (1954).
\item[334] See generally Latman, supra note 51. In \textit{Mazer}, the copyright authorities persuaded the Supreme Court to hold that statuettes of male and female dancing figures were copyrightable despite their commercial use as lamp bases and notwithstanding the availability of statutory protection for ornamental designs under the Design Patent Act of 1842. \textit{Mazer}, 347 U.S. 201, \textit{affg} 204 F.2d 472 (4th Cir. 1953). Prior to 1948, the Copyright Office had generally refused to register three-dimensional designs of useful articles for copyright protection despite enabling language in the statute itself. See, e.g., Derenberg, supra note 72, at 627, 646-48; Note, \textit{Protecting the Artistic Aspects of Articles of Utility: Copyright or Design Patents}, 66 HARV. L. REV. 877, 879 n.16 (1953).
\item[335] In 1948, the Berne Union countries agreed to require some recognition of applied art in the domestic copyright laws of member states without setting minimum standards. See S. RICKETSON, supra note 1, at 276-79; 2 S. LADAS, supra note 1, at 828-37; supra note 42. That same year, the United States Copyright Office cautiously allowed certain works of artistic craftsmanship to register for protection if they qualified as "works of art in the historical and ordinary sense." The decision in \textit{Mazer}, by upholding this qualified recognition of applied art, facilitated future copyright relations between the Berne Union countries and the United States, which adhered to the Universal Copyright Convention in 1952. See generally Reichman, \textit{Designs Before 1976}, supra note 17, at 1149-53, 1150 nn. 26-27, 1174-81.
\end{footnotes}
from those that would qualify only as "ornamental designs of useful articles" under either the existing design patent law or any sui generis design law that might later be enacted. On this most crucial issue of demarcation, moreover, the international conventions offered little guidance, given that at least three orthodox national viewpoints had survived all efforts to reach some unifying consensus at the Brussels Conference to Revise the Berne Convention in 1948.

The United States Copyright Office had traditionally opposed the "unity of art" doctrine championed by France and the principle of broad copyright protection for industrial design to which it led. After an abortive experiment with a regime of partial cumulation like that in the Federal Republic of Germany, the Register interpreted Mazer as authority for establishing a neo-Italian regime of noncumulation, built around the criterion of separability, in regulations promulgated in 1958. These regulations

337. Although the United States had actively opposed copyright protection of commercial designs and supported the revision of the Paris Convention, supra note 1, art. 5 quinquies, see supra notes 16-18, 33, 109 and accompanying text, its domestic design law arguably remains inconsistent with the spirit of the Brussels compromise of 1948, see supra note 335, owing to the lack of a sui generis design law. See, e.g., Final Report of the Ad Hoc Working Group on U.S. Adherence to the Berne Convention, at 609-12, reprinted in 10 COLUM. J.L. & ARTS 97-100 (1986) (discussing tension between current United States law and the Berne provisions concerning applied art). Whether United States law is or was inconsistent with the letter of the Paris Convention presents a different and closer question. See supra note 109; text accompanying note 331.
338. See supra notes 43-46, 335 and accompanying text (discussing the French regime of total cumulation between copyright protection of applied art and that country's special design law; the Italian regime of noncumulation between copyright law and a special design law; and the various regimes of partial cumulation typified by that of the Federal Republic of Germany).
340. In 1956, the Copyright Office issued regulations that interpreted Mazer as allowing copyright protection only for an object that was "clearly a work of art in itself." See, e.g., Bailie v. Fisher, 258 F.2d 425 (D.C. Cir. 1958). This test resembled the one used by courts in the Federal Republic of Germany to distinguish a few exceptionally creative designs eligible for copyright protection from the bulk of commercial designs confined to a sui generis law. See supra note 45 and accompanying text. It also resembled the criterion later incorporated into article 21 of the Uniform Benelux Designs Law, supra note 4. But the 1956 regulation antagonized the Court of Appeals for the Second Circuit, which questioned the Register's authority to implement a regime of partial cumulation along these lines and hinted at tension with the principle of non-discrimination expressed in Bleistein v. Donaldson Lithographing Co., 188 U.S. 239 (1903). See Vacheron & Constantin-Le Coultre Watches, Inc. v. Benrus Watch Co., 260 F.2d 637 (2d Cir. 1958), modifying 155 F. Supp. 932 (S.D.N.Y. 1957). The Copyright Office withdrew this regulation in 1958. See generally Reichman, Designs Before 1976, supra note 17, at 1174-82. The United States experience in the period 1956 to 1958 thus anticipated later judicial resistance in the Netherlands to the "clearly marked artistic character" criterion adopted by article 21 of the Uniform Benelux Designs Law, supra note 4. See, e.g., Cohen Jehoram, Netherlands, supra note 46, § 2(c); infra notes 407-08 and accompanying text.
341. See Reichman, Designs Before 1976, supra note 17, at 1181-82. The authorities took pains to identify Italian law as the fountain of their own expedient, a move that made it
served to exclude virtually all modern, three-dimensional designs from protection as works of applied art under the Copyright Act of 1909.342

When, in 1976, Congress finally codified the criterion of separability in section 101 of the new Copyright Act,343 it seemed to preclude further consideration of full copyright protection for industrial art in the name of Mazer.344 But the congressional decision not to enact a sui generis design bill, pending since the 1950s,345 also meant that the commercially most valuable appearance designs were relegated once again to the very design patent law whose ineffectiveness had initially triggered the movement for reform.346 Only when the Court of Appeals for the Federal Circuit later took steps to revitalize the design patent law347 would this codified criterion of separability actually begin to discharge its systemic function of shunting some noncopyrightable industrial designs into an operative design protection law. As the domestic design patent law began to revive after 1982, the corresponding provisions in copyright law became less incoherent than they had appeared in 1976.348

a. Separability Is Sometimes Conceptual

The treatment afforded works of applied art in domestic law nonetheless manifests numerous incongruities that defy systematic rationalization. This occurs in part because of ambiguities inherent in the doctrine of separa-


343. See supra note 21 and accompanying text.

344. See supra notes 19-22 and accompanying text; infra notes 369-74.


346. See H.R. REP. NO. 1476, 94th Cong., 2d Sess. 54-55 (1976); supra notes 72-77 and accompanying text.

347. See supra text accompanying notes 171-331.

rability itself and in part because certain traditional categories of applied art retained their privileged status under the 1976 Act, notwithstanding the restrictive definition of "pictorial, graphic and sculptural works" set out in section 101.

(1) Established Categories of Applied Art

For example, most two-dimensional designs, including fabric and textile designs, remain copyrightable even when subsequently embodied in useful articles, according to the official interpretation of separability derived from *Mazer*. A troublesome subcategory comprises "maps, globes, charts, diagrams, models, and technical drawings," which are expressly treated as pictorial, graphic and sculptural works within the broad definition codified by section 101. Maps must sometimes satisfy a higher standard of creativity, while architectural works were in effect assimilated to designs of useful articles and subjected to a variant of the separability criterion.

Fortunately, copyright protection of blueprints or of other technical drawings as pictorial or graphic works cannot normally extend to the useful articles they portray, owing to the codification, in 1976, of a line of prec-

349. *See infra* text accompanying notes 374-98.


352. 347 U.S. 201 (1954); *see supra* notes 340-44 and accompanying text. The reasoning is that a two-dimensional painting does not forfeit eligibility when embodied in a useful article. *See, e.g.*, Bleistein v. Donaldson Lithographing Co., 188 U.S. 239 (1903); Baker v. Selden, 101 U.S. 99 (1879) (discussing works that appeal to aesthetic taste in dicta). Most two-dimensional designs are then assimilated to paintings, including technical drawings and architectural plans. *But see* Beverly Hills Design Studio (N.Y.), Inc. v. Morris, 13 U.S.P.Q.2d (BNA) 1889 (S.D.N.Y. 1989) (upholding the denial of copyright registration to two-dimensional paper patterns used to cut fabric for garments). The Beverly Hills decision in the United States would be consistent with the dominant line of cases in Italian law, which regards two-dimensional fabric and textile designs as inseparable from the useful articles that embody them. *See, e.g.*, G. SENA, *I DIRITTI SULLE INVENZIONE E SUI MODELLI INDUSTRIALI* 537-38 (1984). *But see* Auteri, *supra* note 342, at 590-91 (contending that two-dimensional designs, including fabric designs, should be deemed separable as a matter of law).


355. *See generally id.* at 98-102, 202-04 (noting that a copyright in architectural plans gave only the exclusive right to reproduce the plans in copies) (citing authorities). In effect, only monumental or ornamental buildings could secure copyright protection. However, bills were recently introduced to bring the protection of architectural works more into line with the minimum standards under the Berne Convention, and Congress adopted one of these bills late in 1990. *See The Judicial Improvement Act of 1990, Pub. L. No. 101-650 (H.R. 5316). Title VII, "Architectural Works," reprinted in 41 Patent, Trademark & Copyright J. (BNA) 133, 134-35 (Dec. 6, 1990). Works of architecture as such are beyond the scope of this Article.

edents descending from the Supreme Court's 1879 decision in *Baker v. Selden*.357 These precedents subordinate the exclusive reproduction right of copyright law to the traditional right of third parties to reverse engineer the ideas embodied in unpatented products of mechanical and technical skills. For this reason, a third party may freely imitate a dress or unpatented automobile parts so long as he does not copy the two-dimensional plans from which these objects were initially made,358 in contrast with the situation prevailing in the United Kingdom prior to the Copyright Designs and Patents Act of 1988.359

Some three-dimensional works of applied art have also survived codification of the separability test in 1976. For example, the creators of dolls, costume jewelry, figurines, some toys, and certain other three-dimensional objects still obtain copyright protection360 either because courts deem such items not to be useful articles at all361 or more typically because they qualify as separable works of sculpture even if embodied in useful articles.362 These subject matter categories thus fall within the shadow tradi-
tionally cast by Mazer, and they often figure in litigation.\textsuperscript{363}

Most three-dimensional designs of useful articles remain unprotectable, of course, owing to the separability criterion in copyright law\textsuperscript{364} and to the nonobviousness requirement in design patent law.\textsuperscript{365} Between these two doctrinal barriers, however, lies an uncharted territory inhabited by exceptionally creative designs that might have qualified for design patent protection had their originators not neglected to file timely applications within the one year novelty grace period that United States patent law generously provides.\textsuperscript{366} The question that sooner or later bedevils the highest tribunals in every country that has ever enacted a design protection law\textsuperscript{367} is how to deal with palpably superior designs of this kind when their penitent creators supplicate at the door to copyright law after having failed to comply with the burdensome prerequisites of any design law that happens to be in force.\textsuperscript{368}

\textbf{(2) Partial Cumulation in the Second Circuit}

Shortly after Congress codified separability as the criterion for distinguishing copyrightable works of applied art from noncopyrightable "industrial designs,"\textsuperscript{369} the federal appellate courts denied copyright protection to the attractive, modern forms of an outdoor parking lamp and of a set of

\textsuperscript{363} I P. Goldstein, supra note 28, at 156.
\textsuperscript{365} See supra notes 175-90, 260-68, 319-31 and accompanying text.
\textsuperscript{366} See supra notes 90-91 and accompanying text. Such designs have destroyed their own novelty.
\textsuperscript{367} For the most recent tensions of this kind in foreign law, see, e.g., Cohen Jehoram, Cumulative Design Protection—A System for the EC? [hereinafter Cohen Jehoram, Cumulative Protection], in DISEGNO INDUSTRIALE E PROTEZIONE EUROPEA 55, 60-64 (1989); infra notes 406-08 and accompanying text.
\textsuperscript{368} To the extent that courts view certain exceptional designs as copyrightable works of applied art, they exempt originators from the very formalities of registration and deposit that design protection laws normally require. See, e.g., Berne Convention, supra note 1, art. 5(2) (providing that the "enjoyment and the exercise of these rights shall not be subject to any formality"); WORLD INTELLECTUAL PROPERTY ORGANIZATION, GUIDE TO THE BERNE CONVENTION FOR THE PROTECTION OF LITERARY AND ARTISTIC WORKS (PARIS ART, 1971) 33-34 (1978) [hereinafter WIPO GUIDE]. This in turn undermines the policies that prompt legislatures to enact special design laws in the first place. See, e.g., Fabiani, La protezione dell'arte applicata, supra note 18, at 415. To the extent that courts deny copyright protection to these same designs in deference to a design law, they risk violating the principle of nondiscrimination present in all developed copyright laws. From a comparative standpoint, the recurrence of this dilemma under even the most up-to-date design protection laws explains why the legal history of industrial art in the twentieth century may be viewed as a continuing effort to establish special regimes of design protection without unduly derogating from the general principles of copyright law.
\textsuperscript{369} See supra notes 19-21 and accompanying text.
wire-spoked hubcaps. None of these designs could stand alone as a work of art when separated materially from the utilitarian articles they embellished. As to an "isolated reference" to conceptual separability in the legislative history, these courts stressed that Congress did not intend by this notion to tolerate long-term copyright protection for the very designs to which it had just denied even short-term relief in a sui generis law. Rather, the legislative intent was to exclude copyright protection for the overall shape or configuration of a utilitarian article no matter how "aesthetically satisfying and valuable" it might be. On this interpretation, enactment of the separability criterion traded the ineligibility of modern designs as a class for the difficulties inherent in making judgments about art in specific cases.

These early decisions under the United States Copyright Act of 1976 reflected the same strategy that Italian courts used to "avoid the ambiguities inherent in the theory of dissociation by holding three-dimensional designs of useful articles to be inseparable as a matter of law in nearly all cases." The theory of dissociation as elaborated in Italy, however, does recognize an exception to the general rule of separability for conceptually separable designs that can stand alone as works of art. Strictly interpreted, the design of a useful article meets this conceptual separability test only if it can be reproduced and applied to other material supports without sacrificing either its individuality or its existence as an artistic work independent of the object with which it is associated. For example, the form

370. See Norris Indus., Inc. v. ITT Corp., 696 F.2d 918 (11th Cir. 1983) (holding designs of wire-spoked automobile wheel covers not copyrightable because functional and artistic components were inseparable); Esquire, Inc. v. Ringer, 591 F.2d 796, 800 (D.C. Cir. 1978) (holding the modern design of an outdoor lamp not copyrightable under the criterion of separability codified in the 1976 Act), cert. denied, 440 U.S. 908 (1979); see also Eltra Corp. v. Ringer, 579 F.2d 294 (4th Cir. 1978) (holding typeface designs were not works of art under § 5(g) of the 1909 Act).

371. See H.R. Rep. No. 1476, 94th Cong., 2d Sess. 54, 55 (1976), reprinted in 1976 U.S. CODE CONG. & ADMIN. NEWS 5659-801 (stating that an ornamental design of a useful article can qualify as a copyrightable work of applied art only if it "contains some element that, physically or conceptually, can be identified as separable from the utilitarian aspects of that article"); Esquire, 591 F.2d at 800-01, 803-04 (discussing and interpreting this reference).

372. See H.R. Rep. No. 1476, 94th Cong., 2d Sess. 54, 55 (1976), reprinted in 1976 U.S. CODE CONG. & ADMIN. NEWS 5659-801; Esquire, 591 F.2d at 800; accord Norris, 696 F.2d at 924; see also Fabrica, Inc. v. El Dorado Corp., 697 F.2d 890, 892-94 (9th Cir. 1983); infra text accompanying notes 553-70.

373. See Esquire, 591 F.2d at 805 (stating that the decision of Congress to discriminate against modern, "high-tech" designs as a class was a legitimate, if regrettable, consequence of the legislative policy against copyright protection for industrial designs).

374. Reichman, Designs After 1976, supra note 17, at 352. For the theory of dissociation, which underlies the criterion of separability in foreign law, see generally Reichman, Designs Before 1976, supra note 17, at 1182-86, 1213-23 (citing authorities).

375. See generally G. SENA, supra note 352, at 535-39; Fabiani, I Modelli, supra note 85, at 231-36.

376. See, e.g., Auteri, supra note 342, at 580, 588. Professor Auteri contends that the economic value of the formal element must not depend on the utility of the material support. See also F. PERRET, supra note 8, at 262-63.
of Cellini's saltcellar would qualify as a conceptually separable work of applied art on this approach, not because of its artistic intensity, but because one could apply the same shape to other material supports, such as an inkpot or a candy container, without diminishing its artistic integrity. Conversely, the tendency of today's most gifted designers to integrate form and function would inherently disqualify the bulk of their production.

This strict reading of the conceptual separability doctrine satisfies those commentators who believe that ornamental designs of useful articles are properly confined to industrial property law because copyright protection would unduly distort competition on the general products market. That Italian courts agree appears from recent decisions denying copyright protection to designers whose works are renown for their artistry. Other writers contend, however, that conceptual separability should turn on the artistic intensity of the design in question, which sometimes transcends its material support and renders the useful article an object of contemplation in its own right. Exponents of this view urge courts to assess the artistic impact of particular designs with a view to enabling Italy's most talented designers to qualify for copyright protection under the conceptual separability exception to the general rule of separability. In effect, this school prefers the case-by-case approach of regimes that allow partial cumulation

377. See, e.g., F. Perret, supra note 8, at 262-63; Auteri, supra note 342, at 580, 588. The same would not be true for the shape of a shoe or an automobile, since in these cases the shape is not superimposed upon the objects but constitutes the object itself. F. Perret, supra note 8, at 262-63.


379. See, e.g., id. at 570-74, 592; Fabiani, I Modelli, supra note 85, at 235-36. Professor Fabiani warns that "were copyright law to absorb all the products of industrial design (including automobile spare parts, for example), it would risk weakening the very concept of a law to protect authors." Fabiani, La protezione dell'arte applicata, supra note 18, at 415. (trans.)

380. See, e.g., Fabiani, I Modelli, supra note 85, at 581-82 (noting denial of copyright protection to the design of a multi-purpose container by Enzo Mari and to certain designs of tables and chairs by Rietveld, a leader of the Der Stijl movement); see also Estabilimento Miliardi-Zanova S.r.l. v. Cassina (Court of App., Florence, Italy, Feb. 4, 1989), reprinted in 60 IL DIRITTO DI AUTORE 444, 449-53 (1989). This decision denied copyright protection to three LeCorbusier designs of chairs despite their singular style, elegance of line, balance, and novel shapes, because the forms could never be dissociated from the industrial products and reproduced in the ideal sense as independent sculptural works. The decision also denied protection in unfair competition law because qualified consumers would not be confused by the similarities of design and because competitors could not further vary the unpatented, noncopyrightable designs without compromising their aesthetic integrity. See also Stanghellini, Opera d'arte applicata e disegni e modelli industriali, 60 IL DIRITTO DI AUTORE 453-67 (1989) (discussing Estabilimento Miliardi-Zanova).

381. See, e.g., G. Sena, supra note 352, at 538-39 (citing Auletta, Greco and Vercellone, Bonasi Benucci, among others); Benussi, supra note 8, at 63-64. See generally Magelli, La tutela del design nell'interpretazione della dottrina giuridica e della giurisprudenza, 38 RIV. DIRITTO INDUSTRIALE 205, 208-11 (1989).

382. See, e.g., G. Sena, supra note 352, at 529-30 (contending that the patent approach hinders designers who make an enormous contribution to the Italian way of life and economy); Benussi, supra note 8, at 64 ("the object must attain at least a certain artistic level").
between copyright and design laws, such as occurs in the Federal Republic of Germany, to the total exclusion of modern designs from copyright law under a strict regime of noncumulation as implemented in current Italian law.

The latter school of thought won an eminent convert to its cause when, in 1980, the United States Court of Appeals for the Second Circuit upheld copyright protection for two prize-winning belt buckle designs that demonstrated "substantial originality" and that "rose to the level of creative art." On the authority of Kieselstein-Cord v. Accessories by Pearl, Inc., exceptionally creative designers could sometimes invoke the "conceptual separability" doctrine to prevent competitors from appropriating designs that might have met the nonobviousness standard of patent law if a timely application had been filed. Rejecting the District of Columbia Circuit's thesis that such an exception to the general rule of separability contravened the overall congressional policy against copyright protection of industrial designs, the Second Circuit declared that, "so long as the statute remains in its present form," it will "always be necessary to determine whether in a given case there is a physically or conceptually separable artistic sculpture or carving capable of existing independently as a work of art."

Wittingly or unwittingly, this influential American court had sided with those Italian writers who viewed conceptual separability as a test of artistic intensity or degree. In so doing, its unorthodox methodology closely tracked that of the Supreme Court in the Federal Republic of Germany, which affords copyright protection to a few highly creative designs whose "esthetic content . . . is greater than that asked of objects that are mere designs and models." Courts in numerous other countries have

383. See supra note 45 and accompanying text; Dietz, Germany, Federal Republic, supra note 42, §§ 1[b], 2[c].
384. See, e.g., G. Sena, supra note 352, at 539 (citing authorities); see also Franzosi, Arte e diritto, 26 Rivista Di Diritto Industriale 285, 295 (1977) (criticizing the separability test and endorsing a test based on the prevalence of artistic over utilitarian values).
385. See Kieselstein-Cord v. Accessories by Pearl, Inc., 632 F.2d 989, 990-91 (2d Cir. 1980).
386. Id. at 992-94; see also L. Ballin & Sons, Inc., v. Snyder, 536 F.2d 486, 490 (2d Cir.) (en banc) ("substantial originality"), cert. denied, 429 U.S. 857 (1976).
387. 632 F.2d 989 (2d Cir. 1980).
388. The court conceded that the designs in question would not satisfy the strict test of material separability, which it had applied in other circumstances. See, e.g., Durham Indus., Inc. v. Tomy Corp., 630 F.2d 905 (2d Cir. 1980).
389. See supra text accompanying notes 366-68.
390. See supra notes 371-73 and accompanying text.
392. See supra text accompanying notes 381-84.
393. Reimer, supra note 45, at 40-42. The key operative phrase added by the German High Court was: "The line of demarcation between copyright protection and that of designs and models must not be too low." Id.; accord E. Ulmer, Urheber-Und Verlagsrecht 147 (3d ed. 1980). In effect, the German High Court (BGH) borrowed the evaluative criteria of patent law to distinguish the few copyrightable designs of useful articles that make "an artistic contribution" from the great mass of designs whose fate depends on eligibility under a sui generis design law. See generally Kunz-
adopted similar techniques at various times to fashion what commentators term a regime of "partial cumulation." 394

The Kieselstein-Cord decision thus opened a second front with respect to the separability criterion codified in the Copyright Act of 1976. 395 Ironically, when the Copyright Office had first expressed its preference for partial cumulation in 1956, it was the Second Circuit—in the well-known Vacheron case—that had balked at any digression from the Bleistein principle of nondiscrimination. 396 Wiser by some twenty-five years of experience with the works of applied art that Mazer had ushered in, 397 the successors to this same court discovered—in Kieselstein-Cord—why so many of their foreign counterparts had ultimately derogated from general principles of copyright law when adjudicating legal monopolies in borderline utilitarian works that appeal to both the copyright and the patent paradigms. 398

b. Conceptual Separability Reconsidered

To keep Kieselstein-Cord in perspective one must realize that the majority opinion actually upheld the Copyright Office's own decision to register the belt buckle designs in question. 399 The action of the Copyright Office, in turn, can be reconciled with its long-standing preference for a regime of partial cumulation. 400 Comparative legal history teaches, however, that regimes of partial cumulation remain fully functional only so long as courts require objective evidence of exceptional achievement as a precondition of


394. See supra note 45 and accompanying text. Japanese law reportedly adopts a similar regime. See T. Doi, supra note 82, at 100-01.

395. See generally Reichman, Designs After 1976, supra note 17, at 271-350 ("Partial Cumulation in the Second Circuit"). But see infra text accompanying notes 458-75 (citing evidence that the Second Circuit began to retreat from partial cumulation in 1987).

396. See supra note 340 and accompanying text; Bleistein v. Donaldson Lithographing Co., 188 U.S. 239 (1903); Vacheron & Constantin-Le Coultre Watches, Inc. v. Benrus Watch Co., 260 F.2d 637 (2d Cir. 1958) (criticizing Copyright Office regulation of 1956 based on the "clearly a work of art in itself" criterion). The latest registration was dated 1980. Id.

397. See supra notes 333-34 and accompanying text.

398. See generally Reichman, Designs Before 1976, supra note 17, at 1167-70.

399. See Kieselstein-Cord v. Accessories by Pearl, Inc., 632 F.2d 989, 991 (2d Cir. 1980) (noting that the designs had been registered as "jewelry" or, in the alternative, as "original sculpture and design"). The latest registration was dated 1980. Id.

400. By treating exceptionally creative designs of belt buckles as "conceptually separable" works of applied art, the copyright authorities had carried forward, albeit by different stratagems, the policy of allowing copyright protection for an object that was "clearly a work of art in itself." See supra note 340 and accompanying text. For evidence that the Copyright Office's practice manual at this time was more consistent with partial cumulation than with a strict view of separability, see U.S. COPYRIGHT OFFICE, COMPENDIUM OF COPYRIGHT OFFICE PRACTICES (I) 2-274 (1973) (describing in effect a "prevalence" or "artistic surplus" test like that used in Germany before the Second World War).
copyrightability while confining ordinary commercial designs to whatever design protection laws happen to be in place. The admonition of the Supreme Court in the Federal Republic of Germany, for example, that the "line of demarcation between copyright protection and that of designs and models must not be [set] too low" explains why partial cumulation in that country has stood the test of time.

When, in contrast, appellate tribunals balk at derogating repeatedly from the copyright law's general principle of nondiscrimination, their very hesitation soon frustrates the goal of drawing principled distinctions between eligible and ineligible designs. As inconsistent decisions multiply over time, downward pressures on the criterion in force pull towards ever more expansive copyright protection of industrial art. In the most recent example, "nostalgics of the copyright approach" have persuaded the Benelux Court of Justice to soften the "markedly artistic character" test of applied art adopted in a regional harmonization treaty, with the result that industrial designs in the Netherlands may yet obtain long-term copyright protection in a judge-made regime of total cumulation under the "unity of art" banner.

The Bleistein principle of nondiscrimination is deeply ingrained in the American copyright tradition, as the dissenting opinion in Kieselstein-

402. Reimer, supra note 45, at 40-42 (quoting authority); see supra note 393 and accompanying text.
403. See supra notes 45, 393 and accompanying text; see also Dreier, Le système de cumul partiel de protection par les lois spécifiques et par le droit d'auteur, in OBJECTIF 1992, supra note 46, at 107-15. Dreier observes that, in recent years, the Supreme Court in the Federal Republic may have become slightly more permissive than a decade ago, when Reimer wrote. See Reimer, supra note 45. Even today, however, apart from certain dolls, animal figures and the like, only a few designs that demonstrate "a level of originality . . . palpably higher than the bulk of creations in this domain" can hope to qualify as copyrightable works of applied art in the Federal Republic of Germany. See, e.g., Dreier, supra, at 110-14; Dietz, Germany, Federal Republic, supra note 383, § 21c (citing authorities).
404. See generally Desbois, supra note 7.
405. See, e.g., id. at 74 (criticizing inconsistent decisions "discouraging for their subtlety" that plague foreign regimes of partial cumulation and noncumulation alike).
406. Id.; see also Gaubiac, supra note 7, at 62-63, 66-70.
407. See the Benelux Designs Convention (adopting the Uniform Benelux Designs Law), supra note 17; Reichman, Designs After 1976, supra note 4, at 293-97.
408. See supra notes 46, 367 and accompanying text; Braun, supra note 46, at 97-106; Cohen Jehoram, Cumulative Protection, supra note 367, at 60-65 (discussing the Screenoprints decision by the Benelux Court of Justice on May 22, 1987, and the decision by the Netherlands Supreme Court concerning the same case on January 15, 1988). The Screenoprints decisions appear to permit broad cumulation between the Benelux copyright laws and the Uniform Benelux Designs Law, notwithstanding the anticumulationist language in article 21 of that design law, which limits copyright protection to designs possessing a "markedly artistic character." See Uniform Benelux Designs Law, supra note 4, art. 21; infra note 861.
409. See Bleistein v. Donaldson Lithographing Co., 188 U.S. 239 (1903) (establishing universally recognized principle of nondiscrimination in United States copyright law).
Cord made plain. 410 This worried the United States copyright authorities, who soon had reason to fear that judicial loyalty to Bleistein might deter courts following Kieselstein-Cord from limiting the conceptual separability doctrine to a few exceptionally creative designs. 411 Rather than run this risk, the Copyright Office has recently repudiated its previous decision to register the belt buckle designs in Kieselstein-Cord as a misinterpretation of the separability criterion itself. 412

As the copyright authorities now see it, conceptual separability has nothing to do with aesthetic value, or with the functionality of a design, or with the amount of effort that went into creating it. 413 Nor does it matter that a particular useful object might be worn as jewelry, or that it was the product of a famous designer, or that it had earned prizes and other forms of recognition for artistic excellence. 414 What matters officially is that the form or shape in question can be reproduced in a drawing or on other objects without sacrificing its integrity as an autonomous work of art. In other words, given a design that is "physically inseparable by ordinary means from the utilitarian item," the Copyright Office has determined that conceptual separability could only arise if its aesthetic features were "nevertheless clearly recognizable as a pictorial, graphic, or sculptural work which can be visualized on paper . . . or as free standing sculpture . . . independent of the shape of the useful article" with which it was associated. 415

411. See, e.g., Trans-World Mfg. Corp. v. Al Nyman & Sons, Inc., 218 U.S.P.Q. (BNA) 208 (D. Del. 1982) (holding sculptural features of certain plastic display racks to be conceptually separable works of applied art); see also infra note 518 and accompanying text (citing recent district court cases on separability).
412. See Schrader, Copyright Office Registration of Industrial Designs, 19 U. BALZ. L. REV. 445 (1989). According to Ms. Schrader, the examiner in Kieselstein-Cord did not apply the correct test of conceptual separability, and his approach to the problem was further skewed by treating the belt buckles as a form of jewelry. Id. But the examiner's "erroneous" approach to conceptual separability was in fact consistent with the Compendium of Copyright Office Practices (I) as it stood at the time. See supra note 400 (citing authorities); Reichman, Designs After 1976, supra note 17, at 328 n.341.
413. See U.S. Copyright Office, Compendium of Copyright Office Practices (II) § 505.05 (1984) [hereinafter Compendium II]; Schrader, supra note 412.
414. See Schrader, supra note 412; Compendium II, supra note 413, § 505.05. But see Kieselstein-Cord, 632 F.2d at 992-93 (stressing these very factors); cf. Kunz-Hallstein, supra note 393, at 77 (noting that Supreme Court in Federal Republic of Germany prefers evidence that design seeking to enter copyright law is recognized by artistic circles and museums).
415. Compendium II, supra note 413, § 505.03; Estabilimento Miliardi-Zanova S.r.I. v. Cassina (Court of App., Florence, Italy, Feb. 4, 1989), reprinted in 60 IL DIRITTO DI AUTORE (taking exactly the same line in regard to conceptual separability under Italian law). The Compendium of Copyright Office Practices II adds that the artistic features must be of a kind that "can be imagined separately and independently from the useful article without destroying the basic shape of the useful article. The artistic features and the useful article could both exist side by side and be perceived as fully realized, separate works—one an artistic work and the other a useful article." But "the test . . . is not met by merely analogizing the general shape of a useful article to works
Under this reformulation of the criterion set out in section 101 of the 1976 Act, the designs of the belt buckles in *Kieselstein-Cord* were never separable either physically or conceptually from the shapes of the buckles themselves. The Copyright Office today, according to its General Counsel, if faced with a similar application for registration, would therefore invoke *Esquire, Inc. v. Ringer* and *Norris Industries, Inc. v. ITT Corp.* to deny copyright protection as applied art\textsuperscript{416} and would not follow the majority opinion in *Kieselstein-Cord* for which it was directly responsible\textsuperscript{417}. Indeed, the Office now views the belt-buckle designs exactly as the dissenting judge in *Kieselstein-Cord* argued they ought to have been viewed when he wrote that the "works sued on are, while admirable aesthetically pleasing examples of modern design, indubitably belt buckles and nothing else."\textsuperscript{418}

Remarkable as this may seem, it will not escape the attentive reader that the language now used by the United States copyright authorities to implement the conceptual separability doctrine parallels the approach to that same doctrine recommended by the strict constructionists in Italy, who have so far persuaded the Italian tribunals to heed their advice.\textsuperscript{419} It is, in short, the language of noncumulation preferred by Professors Auteri and Fabiani,\textsuperscript{420} rather than that of partial cumulation preferred by Professors Benussi, Franzosi, and Sena.\textsuperscript{421} In this manner, the United States Copyright Office has written off its historical predilection for regimes of partial cumulation as a lost cause, at least in the absence of a congressional decision to enact a sui generis design law. It has sided with those at home and abroad who would never allow a modern "high tech" design into copyright law no matter how "aesthetically satisfying and valuable" it might be.\textsuperscript{422}

---

\begin{itemize}
  \item \textsuperscript{416} Norris Indus., Inc. v. ITT Corp., 696 F.2d 918 (11th Cir. 1983); Esquire, Inc. v. Ringer, 591 F.2d 796 (D.C. Cir. 1978), cert. denied, 440 U.S. 908 (1979); see supra notes 370, 372; Schrader, *supra* note 412 (stating that the Copyright Office took an active part in obtaining the decision in *Norris*).
  \item \textsuperscript{417} Schrader, *supra* note 412.
  \item \textsuperscript{418} *Kieselstein-Cord*, 632 F.2d at 994 (Weinstein, J., dissenting). Judge Weinstein added that it was "the originator's success in completely integrating the artistic designs and the functional aspects of the buckles that precludes copyright." *Id.* at 995; cf. Schrader, *supra* note 412 (observing that virtually no modern functional design can pass the test of separability as currently applied).
  \item \textsuperscript{419} See supra notes 374-80 and accompanying text.
  \item \textsuperscript{420} See supra notes 376-80. Professor Perret of Switzerland, a leading exponent of the dissociation theory, also takes this position. See F. PERRET, *supra* note 8, at 262-63.
  \item \textsuperscript{421} See supra notes 381-84.
  \item \textsuperscript{422} See supra note 372; *supra* notes 369-74 and accompanying text. "Thus, the mere fact that a famous designer produces a uniquely shaped food processor does not render the design of the food processor copyrightable." *Compendium II*, *supra* note 413, § 503.05.
\end{itemize}
These developments pose two rather intriguing questions. First, one may justifiably wonder how long the Copyright Office will adhere to its own official line, given its past record and the fact that the bulk of the designs qualified to enter copyright law under this doctrine may be less worthy of protection from either an artistic or a commercial standpoint than those likely to be excluded. Assuming the Office sticks to its revisionist line, the second question concerns the judicial response likely to ensue. Will the United States Court of Appeals for the Second Circuit, in particular, fall meekly into line with this administrative conversion to a strict non-cumulationist regime? Or will its more protectionist members cling to the majority opinion in Kieselstein-Cord and maintain the regime of partial cumulation that the copyright authorities had themselves convinced the court to establish in 1980?24

2. Demise of the Neo-German Model?

a. Judicial Aversion to Noncumulation

The first major decision to probe these issues was Carol Barnhart, Inc. v. Economy Cover Corp.,425 which concerned two sets of life-sized human torsos used to display wearing apparel in retail clothing stores. One male-and-female set of torsos wore sculpted shirts; the other was left unclad. All exhibited life-like and anatomically correct features, except that they lacked necks and arms and were hollowed out at the back to hold excess fabric when displaying garments.426 Since the defendant admitted copying both sets of mannequins, the case turned on the validity of the copyrights that the originator thought he had perfected when the Copyright Office agreed to register the forms as sculptural works.427

The lower court disregarded the plaintiff's certificate of registration and denied copyrightability on the ground that the mannequins possessed no aesthetic features capable of independent existence when separated physically or conceptually from the utilitarian aspects of the forms.428 On appeal, a panel of the Second Circuit disregarded the presumption of validity to which a certificate of copyright registration was nominally entitled,429 unlike the Court of Appeals for the Federal Circuit, which had strengthened the presumption of validity afforded to issued design patents.430 This con-

423. See supra notes 360-65 and accompanying text.
424. See supra notes 385-400 and accompanying text.
425. 773 F.2d 411 (2d Cir. 1985).
426. Id. at 412-13.
427. Id. at 413.
429. See 17 U.S.C. § 410(c) (1988), which states that a timely certificate of registration "shall constitute prima facie evidence of the validity of the copyright and of the facts stated in the certificate." The provision adds, however, that the "evidentiary weight to be accorded the certificate . . . shall be within the discretion of the court." Id.
430. See supra notes 163, 172 and accompanying text.
clusion followed, according to the majority, because the Copyright Office did not examine the prior art, nor did its officials need special expertise to decide whether to register a work or not. Hence, judges were as qualified as the Register to view the forms and determine their eligibility under the law,431 a point the Second Circuit had already stressed in *Kieselstein-Cord*.432

When it came to implementing this task, however, the Second Circuit and the Copyright Office turned out to be speaking two different languages. The Copyright Office had accepted the torso forms for registration because a string of precedents, derived from *Mazer*, protected dolls, figurines, and other representational shapes applied to useful articles. The Office therefore regarded the human torso in any form as copyrightable subject matter.433 Viewed from the front, moreover, these particular torsos could stand alone, as sculptured human figures, which brought them within the strict interpretation of separability set out in the 1984 revision of the *Compendium of Copyright Office Practices*.434 The Copyright Office thus feared to deny eligibility lest it appear to have rejected the torso designs merely because they served a useful purpose, contrary to the United States Supreme Court's explicit holding in *Mazer v. Stein*.435 To the extent that *Mazer* rejected a "destination" or "purpose" test, in short, the authorities felt unable to exclude these mannequins without straying from that precedent and from the long-standing administrative practices built around it.436

In contrast, the majority opinion in *Carol Barnhart* perceived the Copyright Office's decision to register these mannequins as illogical largely because the panel seemed unaware that the Office had repudiated its previous action in *Kieselstein-Cord*.437 In *Kieselstein-Cord*, the Office implicitly asked the court to validate belt buckle designs whose exceptional aesthetic qualities made them a museum piece.438 The mannequins used to display retail clothing were hardly creative achievements. Faithful to *Kieselstein-Cord*, the majority in *Carol Barnhart* rejected the proposition that the design of a useful article was entitled to a "lower level of scrutiny" in determining its eligibility "merely because ... [it] falls within a traditional art form."439

431. *Carol Barnhart*, 773 F.2d at 414. The court held that the presumption of validity in copyright law merely ordered the burdens of proof. *Id.*
432. See *Kieselstein-Cord v. Accessories by Pearl, Inc.*, 632 F.2d 989, 994 (2d Cir. 1980).
434. See *Compendium II*, *supra* note 413, §§ 505.03 to 505.05 (*quoted in supra* note 415). This interpretation did not require a separable work of applied art to retain its economic value when reproduced on different material supports, only its overall artistic integrity. For the contrary view in regard to the proper implementation of dissociation theory in Italian law, see *supra* note 376 (citing the view of Auteri).
436. See *supra* notes 360-63 and accompanying text.
437. See *supra* note 412 and accompanying text.
438. *Kieselstein-Cord v. Accessories by Pearl, Inc.*, 632 F.2d 989 (2d Cir. 1980); *Carol Barnhart, Inc. v. Economy Cover Corp.*, 773 F.2d 411, 418 (2d Cir. 1985) (stressing this aspect of *Kieselstein-Cord*).
439. *Carol Barnhart*, 773 F.2d at 418.
Admitting the torso designs to copyright law thus appeared inconsistent with both the legislative history, which denied protection to most aesthetically satisfying commercial designs, and with the court's prior decision in *Kieselstein-Cord*, which had declared that "the vast majority of belt buckles" would not "rise to the level of creative art" under the tests of creativity and conceptual separability the Second Circuit had laid down.

To complicate matters further, Judge Newman, the dissenting member of the *Carol Barnhart* panel, flatly rejected any criterion of aesthetic achievement that derogated from the *Bleistein* principle of non-discrimination. He thus indirectly attacked the majority opinion in *Kieselstein-Cord* at its most vulnerable point, much as Judge Clark, dissenting in *Vacheron*, had attacked Register Fisher's "clearly a work of art in itself" test some twenty years earlier. The *Carol Barnhart* dissent then proposed a new test, to be known as the "temporal displacement" test, that would characterize aesthetic features as conceptually separable if "the article stimulate[s] in the mind of the beholder a concept that is separate from the concept evoked by its utilitarian function." Asked to apply his proposed test to the facts at hand, Judge Newman declared that one set of torsos indubitably satisfied the criterion of conceptual separability as thus defined, while his decision concerning the second set would require more evidence than the record contained.

A majority of the panel, led by Judge Oakes, dismissed this improvised test of conceptual separability as administratively unsound and as an "illusory standard" that led to the "bottomless pit" of copyright protection for industrial art of every kind. In other words, the proposed "temporal displacement" test appeared to be a thinly disguised formula for converting the

440. See *id.* at 418 (noting, however, the contradiction between this policy and the trend toward increased copyright protection for other articles having a utilitarian dimension, such as computer programs); *cf.* *supra* text accompanying notes 25-27.
441. See *Kieselstein-Cord*, 632 F.2d at 994 (stating that the expert witnesses testified and "the Copyright Office's action implied ... [that] the buckles rise to the level of creative art").
442. See *Carol Barnhart*, 773 F.2d at 419, 422-23 (Newman, J., dissenting).
443. See, e.g., Reichman, *Designs After 1976*, *supra* note 17, at 369, 381.
445. *Carol Barnhart*, 773 F.2d at 422, 423 (Newman, J., dissenting). This proposed criterion would allow expert testimony to show that the appearance of an article "would engender in the observer's mind a separate nonutilitarian concept that can displace at least temporarily the utilitarian concept." *Id.* at 423.
446. *Id.* at 424-26. Under this test, one of the designs in *Carol Barnhart* was conceptually separable because it could be entertained in the mind without simultaneously perceiving the forms as mannequins at all. *Id.* at 425. For the difficulties of administering such a criterion and the consequences likely to ensue, see *infra* text accompanying notes 502-06.
447. *Carol Barnhart*, 773 F.2d at 419 n.5 (criticizing the temporal displacement test as "so ethereal as to amount to a 'non-test' "). *But see, e.g., W. Patry, Latman's The Copyright Law* 44-45 (6th ed. 1986) (approving the "temporal displacement" test).
exclusionary criterion of separability into an inclusionary formula inspired by the late Professor Melville Nimmer’s “unity of art” leanings. The majority then ended the debate by denying copyright protection on the grounds that “the features claimed to be aesthetic or artistic, e.g., the life-size configuration of the breasts and the width of the shoulders, are inextricably intertwined with the utilitarian features, the display of clothes.”

Nevertheless, the Second Circuit emerged from this fracas on a collision course with the Copyright Office for the first time since the Vacheron decision in 1958. Ironically, the two sides were now on opposite sides of the fence, with the Second Circuit rooting for partial cumulation and the Copyright Office penitently adhering to a strict noncumulationist line. Meanwhile, the scarecrow of nondiscrimination, raised by the dissent in Carol Barnhart, was about to paralyze the court’s ability to administer its own fledgling regime of partial cumulation.

b. Healing a Split in the Circuits

These tensions came to a head in 1987, when Brandir International, Inc. v. Cascade Pacific Lumber Co. reached the Second Circuit on appeal. This case concerned the modern design of a bicycle rack, made of bent tubing, which the designer had derived from an original wire sculpture that lacked any utilitarian purpose at the time he first created it. On the one hand, the case resembled Kieselstein-Cord in that considerable objective evidence established the superior artistic character of the design. On the other hand, the evidence also showed that the designer had subsequently modified his original wire sculpture in order to make the design functionally more efficient for use as a bicycle rack, a use discovered after he created the form.

This time the Copyright Office had refused to register the design of the bicycle rack because it contained no element “capable of independent existence as a copyrightable pictorial, graphic or sculptural work apart from the shape of the useful article.” The Office thus closed the very door to con-

448. See supra note 51 and accompanying text. The dissenting opinion dwells at length on Professor Nimmer’s own interpretation of conceptual separability. See Carol Barnhart, 773 F.2d at 420-22 (Newman, J., dissenting); 1 M. & D. NIMMER, supra note 28, § 2.08[B][3].

449. Carol Barnhart, 773 F.2d at 419; see also Durham Indus., Inc. v. Tomy Corp., 630 F.2d 905 (2d Cir. 1980).

450. See supra notes 340, 399-400 and accompanying text.

451. 834 F.2d 1142 (2d Cir. 1987).

452. “The RIBBON Rack has been featured in Popular Science, Art and Architecture, and Design 384 magazines, and it won an Industrial Designers Society of America design award in the spring of 1980.” Id. at 1146. In 1984, the rack was selected for an exhibition entitled “The Product of Design: An Exploration of the Industrial Design Process,” which was written up in the New York Times. Id.

453. Id. at 1143, 1146-47.

454. Id. at 1146. The Register of Copyrights was named as a third-party defendant under 17 U.S.C. § 411 (1988), but the Copyright Office chose not to appear after denying eligibility. Id. at 1143.
ceptual separability it had opened in *Kieselstein-Cord* and contemporaneously implemented the strict interpretation of separability to which it had converted in the revised Compendium of 1984.\(^\text{455}\) The authorities also refused registration on the dubious alternative ground that the design consisted of standard, public-domain shapes lacking the requisite degree of originality and creativity, an assessment belied by the laurels this design later won for its creator.\(^\text{456}\)

A panel of the Court of Appeals for the Second Circuit, in contrast, disregarded any question of originality\(^\text{457}\) and formally declined to acquiesce in the Copyright Office’s own retreat from partial cumulation. “‘Conceptual separability’ is . . . alive and well, at least in this circuit,” declared Judge Oakes, writing for the majority, “[t]he problem . . . is determining exactly what it is and how it is to be applied.”\(^\text{458}\) Unable to resolve the controversy over the proper line of demarcation that *Carol Barnhart* had rendered so acute,\(^\text{459}\) this panel, like its predecessors, then divided once again on the meaning of conceptual separability.\(^\text{460}\)

A majority ultimately agreed with the conclusion reached by the copyright authorities that the design of the bicycle rack could not qualify as applied art due to the designer’s perfect integration of form and function.\(^\text{461}\)

In evaluating the conceptual separability exception to the general rule of

---

\(^{455}\) See *supra* notes 411-18 and accompanying text; see also *Animal Fair, Inc.* v. *Amfesco Indus., Inc.*, 620 F. Supp. 175, 186-88 (D. Minn. 1985), *aff’d* without opinion, 794 F.2d 678 (8th Cir. 1986) (upholding the design of a slipper resembling a bear’s paw that the Copyright Office had accepted for registration).

\(^{456}\) See *Brandir*, 834 F.2d at 1146.

\(^{457}\) *Id.* Use of a quantitative creativity requirement, couched in terms of “substantial originality” or of a “substantial variation” from pre-existing designs, was not anomalous in itself after 1976, particularly in the Second Circuit. This doctrine could also exclude variations attributable to physical or manufacturing skills, rather than to true artistic skills. See, e.g., *Durham Indus., Inc.* v. *Tomy Corp.*, 630 F.2d 905, 910-11 (1980); *L. Batlin & Son, Inc.* v. *Snyder*, 536 F.2d 486 (2d Cir.) (en banc), *cert. denied*, 429 U.S. 857 (1976). The Copyright Office has properly begun to make more aggressive use of this doctrine to exclude borderline utilitarian works that reveal only miniscule variations from matter still in copyright or already in the public domain. See, e.g., *J. P. Goldstein, supra* note 28, at 68-71 (noting recent cases requiring nontrivial variations). But see *Atari Games Corp.* v. *Oman*, 888 F.2d 878 (D.C. Cir. 1989) (questioning authority of Register to deny copyrightability of a videogame for lack of creativity and because the design was not an original work of authorship within 17 U.S.C. § 102(a), *vacating and remanding* 695 F. Supp. 1204 (D.D.C. 1988). In applying the *Batlin* standard of substantial creativity to both industrial art and industrial literature, the Copyright Office examiners need to avoid piecemeal decomposition, a lesson that the patent examiners had to absorb from 1980 on. See *supra* notes 136-38 and accompanying text; *Reichman, Programs as Know-How, supra* note 23, at 683-89 (“‘Originality’ and the Burden of Overlapping Claims”).

\(^{458}\) *Brandir*, 834 F.2d at 1144. Judge Oakes was the author of all the majority opinions under review, *viz.*, those in *Brandir*, 834 F.2d 1142; *Carol Barnhart, Inc.* v. *Economy Cover Corp.*, 773 F.2d 411 (2d Cir. 1985); and *Kieselstein-Cord v. Accessories by Pearl, Inc.*, 632 F.2d 989 (2d Cir. 1980).

\(^{459}\) See *supra* notes 438-50 and accompanying text.

\(^{460}\) Compare *Brandir*, 834 F.2d at 1142-50 (majority opinion by Oakes, J.) *with id.* at 1150-52 (Winters, J., concurring in part and dissenting in part).

\(^{461}\) See *id.* at 1147-48; *infra* text accompanying notes 470-75.
separability, however, the majority pointedly declined to enquire whether the design in question displayed "substantial originality" and "rose to the level of creative art," as the majority in Kieselstein-Cord had done.\footnote{462} Given the merger of form and function in this highly artistic design of a bicycle rack, that was the logical issue to pursue under the neo-German regime of partial cumulation the Second Circuit had appeared to favor in 1980.\footnote{463}

Such an analysis would have broken too openly with the principle of nondiscrimination that had surfaced in Carol Barnhart, however. Instead, a chastened majority, speaking through Judge Oakes, now joined with the Copyright Office in officially disavowing further attempts to measure conceptual separability in terms of artistic achievement because they had been "reminded . . . by numerous . . . opinions . . . that we judges should not let our own views of styles of art interfere with the decisionmaking process in this area."\footnote{464} In the Second Circuit as in the Copyright Office, in short, the Bleistein principle of nondiscrimination would formally restrict the legal criteria used to draw the line of demarcation between applied art and industrial designs once again.

The matter did not rest there, however, because the Brandir majority then declined to take the easy way out by simply endorsing the Copyright Office's own revisionist interpretation of the separability criterion.\footnote{465} On the contrary, the majority now professed to discover a new test of conceptual separability, launched by Professor Denicola in 1983,\footnote{466} which distinguished between copyrightable works of applied art "whose origins lie outside the design process, despite the utilitarian environment in which they appear," and ordinary industrial designs that inhibit "the unconstrained perspective of the artist."\footnote{467} On this approach, which might be termed the "design process and nature of the work" test,\footnote{468} conceptual separability would depend on "the extent to which the work requires artistic expression uninhibited by functional considerations."\footnote{469}

Armed with this new key to the two-hundred year old mystery of how to collocate industrial designs within the framework of the world's intellectual property system, the Brandir majority inspected the design of the bicycle rack for elements that could "be identified as reflecting the designer's artistic judgment exercised independently of functional considerations."\footnote{470} In so doing, it affirmed the belief that the shape of a telephone influenced by Arp, Brancusi, or Moore would surely satisfy this new test of conceptual

\footnote{462}{See Brandir, 834 F.2d at 1145; supra notes 385-98 and accompanying text.}
\footnote{463}{See supra note 45; supra notes 392-95 and accompanying text.}
\footnote{464}{Brandir, 834 F.2d at 1145 n.3; see supra notes 412-15 and accompanying text (noting that Copyright Office disavows artistic value as factor in assessing conceptual separability).}
\footnote{465}{See supra notes 412-15 and accompanying text.}
\footnote{466}{See Denicola, supra note 194, at 741-48.}
\footnote{467}{Brandir, 834 F.2d at 1145 (quoting Denicola, supra note 194, at 741).}
\footnote{468}{Id.}
\footnote{469}{Id. (quoting Denicola, supra note 194, at 741).}
\footnote{470}{Id.}
separability. To the dismay of the dissent, however, the bicycle rack in Brandir failed even this test because its form, as finally adopted, was significantly influenced by utilitarian concerns. Any plea that the design might qualify as minimalist art was therefore unavailing, as were the numerous awards it had garnered. Indeed, these very awards only served to establish that the designer of the bicycle rack had “achieved . . . the highest goal of modern industrial design, that is, the harmonious fusion of function and aesthetics,” which now made it uncopyrightable by definition.

3. Critical Evaluation of Current Law

The Brandir decision is the least persuasive of the cases applying the conceptual separability test after 1976. For example, the majority’s exaggerated concern about violating the rule in Mazer would have been justified under the regulations issued prior to 1976 because nothing in Mazer or the 1909 Act expressly supported the separability criterion that the Copyright Office had engrafted upon the Supreme Court’s opinion. After the codification of 1976, however, section 101 authorized courts to rule that even modern shapes analogous to abstract works of sculpture might forfeit eligibility as works of applied art if their forms were inseparably joined with a functional application in the design of a useful article. Doctrinally, this follows from the strict interpretation of separability, which denies protection to shapes that cannot be reproduced on other material supports without loss of artistic integrity. In policy terms, this result serves to prevent the exclusive reproduction rights of copyright law from disrupting the application of design patent law to “high tech” designs that are sold on the products market rather than on the market for artistic works as such.

The Brandir majority complained that, under the Copyright Office’s current interpretation of separability, a superior modern design of a bicycle rack could not enter copyright law while a telephone shaped like Mickey

471. Id. at 1145 n.3.
472. Id. at 1150-52 (Winter, J., concurring in part and dissenting in part).
473. Id. at 1147.
474. Id.
475. Id. at 1147-48 (stating that “there remains no artistic element of the RIBBON Rack that can be identified as separate and ‘capable of existing independently, of, the utilitarian aspects of the article’ ”).
476. See id. at 1144.
477. See supra notes 339-42 and accompanying text. Indeed, there was language in Mazer that could be read to support the “unity of art” approach, as the late Professor Nimmer was fond of pointing out. See supra note 51 (quoting Nimmer).
478. See supra notes 19-21, 343-44 and accompanying text.
480. See supra notes 374-80 and accompanying text.
481. See infra text accompanying notes 832-47 (“The Two-Market Conundrum”).
Mouse would pass muster. This unpalatable result might understandably have prompted the Second Circuit to stress the transcendental qualities of the bicycle rack _qua_ art, as it had done for the belt buckles in _Kieselstein-Cord_. But the majority could neither bring itself to confirm that precedent, in deference to _Bleistein_ and the principle of nondiscrimination, nor to affirm the strict version of separability now in favor at the Copyright Office. Rather, the majority tried to weasel out of its dilemma by stressing that the designer had not applied his sculpture to a useful object in the pure and unadulterated form with which it had come into being.

In other words, the majority refused to protect a sculptural form because the creator had subsequently altered its dimensions in order to increase its efficiency as a bicycle rack. By emphasizing the purpose of these posterior design modifications, however, the opinion allowed eligibility to turn fortuitously on the process or sequence of decisions taken by the designer, and it raised the spectre of a de facto destination test that did conflict with _Mazer_ as codified in 1976. Dissenting Judge Winter chided his brethren for this aberration, which he and Judge Newman had brought about by over-emphasizing the role of _Bleistein_ in an industrial milieu, and the Copyright Office has distanced itself from the reasoning—but not the end result—in _Brandir_. At least one district court has also rejected this aspect of _Brandir_ while latching onto the protectionist opportunities latent in the majority's dicta concerning the continued vitality of conceptual separability in the Second Circuit.

The _Brandir_ majority's ruminations on aesthetic philosophy were even more disconcerting than its propensity to tinker with the venerable theory of dissociation. The opinion suggests that the pioneers of modern design would have sympathized with the "design process" test because the streamlined shape of a telephone "may be equally divorced from utilitarian influences as a telephone shaped like Disney's Mickey Mouse." In reality, Arp, Brancusi, and Moore would have been appalled to learn that the modern design of a telephone they inspired might become copyrightable in the United States because courts deemed it "sufficiently divorced from utilitarian influences." They would insist that, in their telephones, art and utility

482. _See Brandir_, 834 F.2d at 1145 n.3; _see also_ Denicola, _supra_ note 194, at 746.
483. _See supra_ notes 385-91 and accompanying text.
484. _See Brandir_, 834 F.2d at 1145 n.3.
485. _See id._ at 1147.
486. _Id._ (stressing that "the designer has clearly adapted the original aesthetic elements to accommodate and further a utilitarian purpose").
488. _See Brandir_, 834 F.2d at 1152 (Winter, J., concurring in part and dissenting in part).
489. _See supra_ notes 442-44 and accompanying text.
490. _See Schrader, supra_ note 412.
492. _See supra_ notes 471, 482. That only the telephone shaped like a mouse was protectible under precedents recognized by the copyright authorities looked like an anomaly in the doctrine of separability, as the majority chose to view it.
had merged, that no "divorce" whatsoever was possible or desirable, and that the object had to be protected as a superior creative achievement for that very reason.493

Whatever its merits, the Supreme Court in the Federal Republic of Germany could accommodate such an argument under that country's prototypical regime of partial cumulation, especially if expert testimony objectified the level of artistic achievement,494 and this had been the Second Circuit's approach in *Kieselstein-Cord*.495 In contrast, the Supreme Court of Italy, while capable of accommodating this argument without any theoretical difficulties, would decline to implement it in practice lest lower courts undermine the primacy of the sui generis design law through the vagaries of a case-by-case analysis of conceptual separability.496 In other words, both the Italian Supreme Court after 1957497 and the United States Copyright Office after 1984 would apply the strict doctrine of separability to cases like *Brandir* on the grounds that their respective legislators had established design patent laws to promote the decorative arts without unduly burdening free competition.

Between these extremes, the *Brandir* majority implied that Professor Denicola's "design process" test enabled the Second Circuit to establish a new and more flexible approach to conceptual separability that would avoid the supposed anomalies of dissociation theory without derogating from the principle of nondiscrimination.498 Those familiar with the long history of foreign design law, however, will have reason to doubt that the "design process" test discovered in *Brandir* was very new at all. On the contrary, Denicola's test, like its Italian counterpart launched by Professor Franzosi in 1977,499 bears marked affinities to similar tests that were used and discarded in France and other countries during the nineteenth and early twentieth centuries.500 It also evokes the "aesthetic surplus" or "prevalence" test,

493. See, e.g., J. HESKETT, INDUSTRIAL DESIGN 85-104 (1980).
494. See supra notes 401-03 and accompanying text; Kunz-Hallstein, *supra* note 393, at 76-77.
495. See supra notes 386-89 and accompanying text.
496. See supra notes 374-80 and accompanying text.
497. See Note, Systematic Approach, *supra* note 341, at 288. This anonymous "note" on Italian law, condensed and translated from *IL DIRITTO D'AUTORE* 27-32 (1957), was mysteriously published in its United States version about the time that the Copyright Office was introducing the criterion of separability into its 1958 Regulation.
498. See supra notes 465-69 and accompanying text. The Copyright Office assimilates Denicola's test to the "primary purpose" test it had sometimes used in the past. See *supra* note 400 and accompanying text; Schrader, *supra* note 412 (stressing that the Office does not apply the Denicola test).
499. See Franzosi, *supra* note 384, at 295 (proposing that a design should be deemed separable and protectible if the observer "appreciates the work more for its aesthetic value than for its utilitarian value. If the observer finds its artistic value more significant than its utilitarian value, or if indeed the artistic value should make one almost forget the utilitarian value," the separability test would be met) (trans.). Compare Franzosi, *supra* note 384, at 295 with *supra* text accompanying notes 466-69 (discussing Denicola's "design process" test) and *supra* text accompanying notes 442-46 (discussing Judge Newman's "temporal displacement" test).
500. See, e.g., F. PERRET, *supra* note 8, at 242; Gaubiac, *supra* note 7, at 46-47 (attributing
used for a time by the High Court of Germany after the First World War, which recognized a protectable work of applied art "when the extra esthetic element added to the functionalism of the forms, whatever the artistic value, attains to such a degree that one can speak of art, taking into account generally accepted opinion."[501]

If one bothers to ask why these and innumerable other tests that appear plausible on their face are always discarded sooner or later in this peculiar corner of the law, the answer is always the same: Such tests inherently defy consistent administration on a case-by-case basis.[502] Over time, courts applying any of these tests will either succumb to protectionist pressures thrusting downwards towards the "unity of art" position—as seems to be occurring in the Benelux countries today[503]—or they will tilt upwards towards an overt test of aesthetic accomplishment, as occurred in the Federal Republic of Germany after the Second World War.[504] In effect, the Supreme Court in the Federal Republic allows copyright law to shelter ornamental designs of useful articles from competition on the products market only if they meet a de facto nonobviousness standard of aesthetic achievement borrowed from industrial property law for the specific purpose of

the criterion based on the secondary or accessory character of the aesthetic features to Philippin, Traité Théorique et Pratique de la Propriété des Dessins et des Modèles Industriels (1880), who emphasized the gratuitous nature of art "applied" to industrial objects as distinct from designs determined by the utilitarian object itself. In all, French courts and commentators struggled with at least five different criteria in seeking to determine the line of demarcation between industrial designs and applied art during the nineteenth century. See generally Reichman, Designs Before 1976, supra note 17, at 1154-55. The unity of art doctrine was adopted in exasperation with them all. See F. Perret, supra note 8, at 246 (denigrating this result as a makeshift solution).

501. Reimer, supra note 45, at 40-41. The Copyright Office reads Denicola's test this way. See supra note 498.

502. See, e.g., Gaubiac, supra note 7, at 46-47; Desbois supra note 7, at 74. The judges who must administer such tests are alternately appalled now by acts of design piracy, now by the modest creative content of the bulk of the designs clamoring for protection. If they set a low standard of eligibility for copyright protection in order to repress imitation, it becomes impossible to exclude the bulk of designs chronically lacking in creativity. If they set a high standard for copyright protection, they must borrow evaluative criteria from patent law despite the nondiscrimination principle of copyright law, and they must be willing to tolerate slavish imitation in the name of free competition. See generally Reichman, Designs After 1976, supra note 17, at 366-73. Use of such criteria inevitably produces a zig-zag line of cases that furnishes the "unity of art" school with its most potent ammunition. See, e.g., E. Pouillet, Traité Théorique et Pratique Des Dessins et des Modèles 51 n.1 (5th ed. 1911) (deploiring that, under such tests, "the result is the worst inconsistencies and the most unexpected contradictions"); Desbois, supra note 7, at 74 (stating that the unity of art thesis "avoids controversies discouraging for their subtlety and inconsistent decisions on the merits") (trans.). This dilemma pushes courts and legislators into one of the three competing options still available today—total cumulation in copyright law; total noncumulation outside copyright law; or partial cumulation based on de facto criteria of artistic achievement. See supra notes 42-46, 368 and accompanying text.

503. See supra notes 46, 367-68, 407-08 and accompanying text.

504. See supra notes 401-03 and accompanying text. Under this test, the artistic aspect need not exceed the functional aspect at all. See, e.g., Reimer, supra note 45, at 42-43.
defending the integrity of the design protection law in force.\(^{505}\)

That the "design process" test endorsed in *Brandir* suffers from these defects was later conceded by its originator, Professor Denicola, and by Professor Brown, who believes that it will "leave too much room for self-serving declarations of aesthetic aims."\(^{506}\) Perhaps the most ironic and instructive aspect of the *Brandir* opinion is that the majority, having discovered this test, may not actually have applied it in the end. Pressed by the dissent to follow *Kieselstein-Cord* to its logical conclusion,\(^{507}\) the majority was forced to acknowledge that the bicycle rack in question was just a "product of industrial design" whose "[f]orm and function [were] inextricably intertwined . . . being as much the result of utilitarian pressures as aesthetic choices."\(^{508}\) Like the outdoor lamp in *Esquire, Inc. v. Ringer*,\(^{509}\) the artistic elements of the bicycle rack, though "worthy of admiration," were inseparable from the functional elements in which they merged, even if the form of the rack existed independently as a work of art in the minds of the experts.\(^{510}\) The *Brandir* majority thus ended by denying protection for much the same reason that the Register of Copyrights had refused to register the design in the first place,\(^{511}\) and a collision between the court and the Copyright Office was narrowly averted at the last moment.

That the Second Circuit has tired of its experiment with partial cumulation can hardly be doubted after this decision, as Judge Winter's dissent gleefully pointed out.\(^{512}\) If Brandir's award-winning design of a bicycle rack, derived from an original wire sculpture, was not conceptually separable, despite the majority's dicta about "design process," then the operative test of separability in the Second Circuit resembled the test used in those other federal appellate courts that had excluded the designs of an outdoor lamp, of wire-spoked hubcaps, and of carpet display folders on grounds of inseparability.\(^{513}\) Weary of more bloody struggles in the name of nondiscrimination, Judge Oakes in particular may henceforth tend to view con-

---

\(^{505}\) See, e.g., E. Ulmer, *supra* note 393, at 147-50; Kunz-Hallstein, *supra* note 393, at 77 (relating the high threshold of eligibility to the German judges' traditional reluctance "to grant the rather long lasting copyright protection to those creations for which the special protection under the . . . [design law] is available"); see also Katzenberger, *Protection of Industrial Designs in Germany, reprinted in Design Protection*, *supra* note 8, at 100-02. However, some recent decisions appear slightly more liberal in regard to copyright protection than in the past. See Dietz, *supra* note 383, § 2[4][c].

\(^{506}\) See Brandir, 834 F.2d at 1150-52 (Winter, J., concurring in part and dissenting in part).

\(^{507}\) Id. at 1147. The majority added that "Brandir has achieved the highest goal of modern industrial design, that is, the harmonious fusion of function and aesthetics." *Id.*

\(^{508}\) 591 F.2d 796, 800-01 (D.C. Cir. 1978), cert. denied, 440 U.S. 908 (1978); see *supra* notes 370-73 and accompanying text.

\(^{509}\) See *supra* note 452.

\(^{510}\) See *supra* notes 454-55 and accompanying text.

\(^{511}\) See *supra* note 194, at 726-27.

\(^{512}\) See *supra* note 383, § 2[4][c].
ceptual separability as a theoretical construct that, in practice, is seldom allowed to temper the policy of whatever design protection law happens to be in force.

If so, the Second Circuit's approach to copyrightable applied art in the future will draw nearer to the neo-Italian construction of *Esquire*, and the split in the circuits, opened in 1980, could largely heal of its own accord.\(^{514}\) Meanwhile, one should not forget that both the majority and the dissent in *Brandir* quietly agreed to remand the design of the bicycle rack to the lower court with instructions to consider its eligibility for protection as "appearance trade dress" under section 43(a) of the Lanham Act.\(^{515}\) Mindful of the growing opportunities to expand the protection of industrial designs under federal unfair competition law, which both the Second and Ninth Circuits had pioneered,\(^{516}\) the majority in *Brandir* may well have concluded that the struggle to install a measured regime of partial cumulation between the patent and copyright laws was no longer worth either the effort or the risks it entailed.

Nevertheless, the *Brandir* majority had gone on record as favoring a "design process" test of conceptual separability, while the dissenting judge in *Brandir* had sided with the *Carol Barnhart* dissent in advocating a "temporal displacement" test of conceptual separability.\(^{517}\) Either test could become highly protectionist over time if endorsed by the Second Circuit as a whole or by other circuits that have not yet pronounced upon these matters. Although the copyright authorities oppose both tests and have intensified their defense of the noncumulationist fortress, district courts in different jurisdictions seem increasingly inclined to cite the protectionist dissents in *Brandir* and *Carol Barnhart*\(^{518}\) rather than the orthodox formulation of Compendium (II) of Copyright Office Practices.\(^{519}\)

It remains to be seen, therefore, whether the experimental regime of partial cumulation operating since 1980 in one United States federal appel-

\(^{514}\) For the split in the circuits opened in 1980, see generally supra text accompanying notes 47-50, 369-95.

\(^{515}\) *Brandir*, 834 F.2d at 1148-49, 1152.

\(^{516}\) For opening moves in this strategy, see infra notes 540-52 and accompanying text; for later and more decisive moves by the same courts, see infra notes 553-70, 620-33 and accompanying text.

\(^{517}\) See supra text accompanying notes 466-75.

\(^{518}\) See, e.g., National Theme Prods., Inc. v. Jerry B. Beck, Inc., 696 F. Supp. 1348, 1354 (S.D. Cal. 1988) (holding costume artwork, including overall shape of at least one costume, copyrightable under "design process" test of *Brandir* because "the artists' communication of their aesthetic judgments [was] exercised independently of functional considerations"); W. Patry, supra note 447, at 45 (contending that the "temporal displacement test is . . . the most persuasive approach to . . . a perplexing issue"). But see Whimsicality, Inc. v. Rubie's Costumes Co., 721 F. Supp. 1566 (E.D.N.Y.) (costume designs were not conceptually separable), vacated and remanded on other grounds, 891 F.2d 452 (2d Cir. 1989).

\(^{519}\) See supra notes 412-18 and accompanying text.
late jurisdiction has really ended or is just temporarily suspended. If the latter, then—absent prompt and carefully contrived sui generis design legislation—there is still reason to fear that "nostalgics of the copyright approach" may yet overpower the partisans of noncumulation in this country as they appear to have done in the Netherlands only a short while ago.\textsuperscript{520}

C. Concurrent Protection of Trade Dress: The Judge-Made Design Law


Comparative intellectual property law demonstrates that, unless restrained by the enactment of sui generis design laws or by the periodic strictures of higher authority, foreign judges are reluctant to condone systematic design piracy in blind obedience to liberal economic theory. Given room to maneuver, there is a nearly universal tendency\textsuperscript{521} to strain trademark and unfair competition laws sounding in the confusion and deception rationales to the point where they at least occasionally deter slavish imitation on a case-by-case basis.\textsuperscript{522} Moreover, courts in some industrialized countries still view slavish imitation as a tort in its own right,\textsuperscript{523} a tendency that has been reactivated by the advent of new technologies that fit imperfectly within the established framework of world intellectual property law.\textsuperscript{524}


\textsuperscript{521} See supra note 502, infra note 522; Reichman, \textit{GATT Connection}, supra note 50, at 794-95 (citing authorities).

\textsuperscript{522} In the Netherlands, for example, heavy-handed judicial recourse to the misappropriation branch of unfair competition law, coupled with pressures from abroad, finally convinced the authorities to enact the Uniform Benelux Designs Law, supra note 4, which took effect in 1975. See, e.g., Braun & Evrard, supra note 520, at 101-22; von Niewenhoven Helbach, \textit{Design Protection and Patent Law, Trademark Law, and the Law of Article 1401 Civil Code, in Benelux and Dutch Law}, in \textit{Design Protection, supra note 8}, at 5-7, 12-18. The Benelux design law attempts to limit concurrent protection in trademark and unfair competition law. See, e.g., id. at 15 (discussing Uniform Benelux Designs Law, supra note 4, art. 14(5)). Whether this effort has succeeded is doubtful. See, e.g., Rose, \textit{Passing Off, Unfair Competition and Community Law}, 12 E.I.P.R. 123, 126 (1990). In contrast, Italy, which takes its design law seriously, has been little inclined to recognize slavish imitation of unprotected designs as unfair competition. See, e.g., Franzosi, \textit{The Legal Protection of Industrial Design: Unfair Competition as a Basis of Protection}, 12 E.I.P.R. 154, 156-57 (1990) [hereinafter Franzosi, \textit{Unfair Competition}]. In Italy as elsewhere, however, there are strong countervailing pressures. See, e.g., Cuonzo, \textit{I limiti al principio di libera imitabilita dei prodotti altrui al di fuori della private industriali: verso la fine di un dogma?}, 38 \textit{Rivista Di Diritto Industriale} 190 (1989); Mangini, \textit{Il marchio e gli altri segni distintivi in 5 Trattato Di Diritto Commerciale E Di Diritto Pubblico Dell' Economia} 168-82 (F Galgano ed. 1982).

\textsuperscript{523} See, e.g., P.J. KAUFMANN, supra note 50, at 83-85, 89.

\textsuperscript{524} See, e.g., Reichman, \textit{GATT Connection}, supra note 50, at 792-93 (discussing problems of protecting applied scientific know-how). Although the Federal Republic of Germany is said to resist this approach, see P.J. KAUFMANN, supra note 50, at 92-96, courts in
That similar pressures were mounting in the United States soon appeared from a number of federal appellate decisions in the 1970s. These cases held that nonfunctional design features left unprotected by the Copyright Act of 1976 might qualify for protection under section 43(a) of the United States trademark law, known as the Lanham Act, which prohibited "a false designation of origin, or any false description or representation" of goods or of "containers for goods." Only a decade or so earlier, the extension of section 43(a) to product simulation appeared illegal owing to constitutional limitations on the protection of unpatented, noncopyrightable product configurations set out in the Supreme Court's Sears-Compco decisions of 1964. Language in these opinions could be construed to prevent both state and federal courts from inhibiting the free imitation of any products not covered by statutory intellectual property laws, except in true cases of passing off. By the that country have been using unfair competition law to protect computer programs. See, e.g., Lowenheim, Legal Protection for Computer Programs in West Germany, 4 HIGH TECH. L.J. 187, 195, 198-200 (1989) (stating that "most cases to date have protected computer programs on the basis of unfair competition law rather than copyright law"). Moreover, article 5(c) of the new Swiss Unfair Competition Law may be viewed as a codified misappropriation law aimed at high technology. See, e.g., Probst, Protection of Integrated Circuits in Switzerland, 4 E.I.P.R. 108, 109-10 (1988); Reichman, Programs as Know-How, supra note 23, at 666-67. For an endorsement of this general approach, see Paepke, An Economic Interpretation of the Misappropriation Doctrine: Common Law Protection for Investments in Innovation, 2 HIGH TECH. L.J. 55 (1987).


Any person who, on or in connection with any goods or services, or any container for goods, uses in commerce any word, term, name, symbol, or device, or any combination thereof, or any false designation of origin, false or misleading description of fact, or false or misleading representation of fact, which

(1) is likely to cause confusion, or to cause mistake, or to deceive as to the affiliation, connection, or association of such person with another person, or as to the origin, sponsorship, or approval of his or her goods, services, or commercial activities by another person . . .


528. See, e.g., Compco, 376 U.S. at 237 ("To forbid copying would interfere with the federal policy, found in . . . the Constitution and in the implementing federal statutes, of allowing free access to copy whatever the federal patent and copyright laws leave in the public domain."); Sears, 376 U.S. at 231 ("An unpatentable article . . . is in the public domain and may be made and sold by whoever chooses to do so."). Following these decisions, courts "were reluctant . . . to grant relief under state or federal law for product imitation or trade dress infringement; many interpreted Sears and Compco as dis-
1970s, however, some federal courts had begun to challenge this interpretation. In their view, if a competitor seemed likely to confuse consumers about the source of a product by imitating nonfunctional design features that had acquired secondary meaning through use, the aggrieved producer could invoke section 43(a) to combat one kind of “false designation of origin” or simply to protect his unregistered trademark. On either
rationale, these courts avoided the preemptive sweep of *Sears-Compco* by stressing that federal policies concerning trademarks and unfair competition were rooted in the Commerce Clause and thus operated on a par with other federal policies implemented by the patent and copyright laws. As resistance to *Sears-Compco* mounted generally and the Supreme Court appeared to relax its strict antiprotectionist stance, this view gained the ascendancy.

The Court of Appeals for the Second Circuit, for example, had relied on section 43(a) in the *Dallas Cowboy Cheerleaders* decision of 1979, which protected decorative features of a football uniform against imitators who caused a likelihood of confusion as to the source or sponsorship of competing goods. In 1981, the Second Circuit returned to this theme on at least

---

536. *See, e.g.*, Compco Corp. v. Day-Brite Lighting, Inc., 376 U.S. 234, 238 (1964) ("If the design is not entitled to a design patent or other federal statutory protection, then it can be copied at will.") (emphasis supplied); cf. 17 U.S.C. § 301(d) (1988) (stating that other federal laws are not preempted by the Copyright Act of 1976); *see also* Pegram, supra note 532, at 337-38, 343-46; Bauer, supra note 534, at 685-90. On this view of the matter, if Congress disagreed with judicial perceptions of the interplay between these policies, it could directly regulate federal torts arising under § 43(a). *See, e.g.*, 1 J.T. McCarthy, supra note 525, § 7:26; supra note 526 (quoting Lanham Act § 43(a) as amended in 1988); *see also* Goldstein, *The Competitive Mandate: From Sears to Lear*, 59 Calif. L. Rev. 873-904 (1971).


538. *See, e.g.*, *In re* DC Comics, Inc., 689 F.2d 1042, 1052 (C.C.P.A. 1982) (Nies, J., concurring) (stating that "this court has adopted the position that each [federal] statute must be interpreted independently of the other . . . and that no one of these [copyright, patent, and trademark] statutes affording protection to a design, preempts the other"); Bauer, supra note 534, at 685-91, 725 n.219, 728. *See generally* J. Gilson, *Trademark Protection and Practice* §§ 2.13[1], 2.13[5] (1988) (stating that "almost every judicial circuit in the United States has come to apply Section 43(a) in trade dress cases, and the trend shows no sign of abating. *Sears* and *Compco* are almost never mentioned by the courts. They are, in fact, moribund."). *But see* Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141 (1989); *infra* text accompanying notes 713-16. The extent to which state trademark and unfair competition laws can still prevent imitation of the overall shape or configuration of a product, despite the Supreme Court's *Sears-Compco* decisions in 1964, remained controversial. *See, e.g.*, Gemveto Jewelry Co. v. Jeff Cooper, Inc., 800 F.2d 256 (Fed. Cir. 1986) (stressing the power of *Sears-Compco* to preclude state claims grounded in product simulation, except where the injunction was narrowly drawn to address "palming off" only); Brown, supra note 32, at 1374-83. *But see* H20 Swimwear, Ltd. v. Lomas, Nos. 40498, 40499, 40500 (N.Y. App. Div. Aug. 16, 1990) (finding noncopyrightable designs of swimwear not preempted under state unfair competition law).

539. *Dallas Cowboys Cheerleaders, Inc. v. PussyCat Cinema, Ltd.*, 604 F.2d 200, 203 (2d Cir. 1979) (affirming preliminary injunction and finding that combination of colors and collocation of decorations had become an unregistered trademark within § 43(a)).
two occasions, notably in *Warner Brothers, Inc. v. Gay Toys, Inc.*, which dealt with the design of a toy automobile made famous in a national television series. Once again the court used section 43(a) to enjoin a competitor from marketing an unauthorized, look-alike version of the original product, in part because it fostered a "likelihood of confusion as to the source or sponsorship" of the toy automobile and in part because the competitor should not be allowed to "reap where [it] had not sown."

Viewed strictly in the context of other federal unfair competition cases that emphasized a confusion or a deception rationale, the *Warner Brothers* decision of 1981 constituted a remarkable example of judicial indiscretion. By blurring the distinction between a design that identified a producer and a design that identified a product, for example, this opinion ignored any limitations that *Sears-Compco* might have placed on the protection of product configurations as such. It also appealed boldly to the very misappropriation rationale, drawn from *International News Service v. Associated Press*, that the Supreme Court had tried to suppress in 1964.

540. Warner Bros. v. Gay Toys, Inc., 658 F.2d 76 (2d Cir. 1981); Harlequin Enters. Ltd. v. Gulf & Western Corp., 644 F.2d 946 (2d Cir. 1981) (holding cover design for series of novels protected by § 43(a)).
541. 658 F.2d 76 (2d Cir. 1981) [hereinafter *Warner Bros.* I].
542. *Id.* at 77-78. The court enjoined the use of certain nonfunctional distinctive symbols in the manufacture and sale of defendant’s toy car, the “Dixie Racer.” These included the bright orange color, the Confederate flag decal, door numerals, and the symbol “General Lee,” placed upon a toy replica of a 1969 Dodge Charger as used in “The Dukes of Hazzard,” a successful television show.
543. *Id.* at 79.
544. *Id.* at 80.
546. The court cited several cases that it claimed had allowed § 43(a) “to encompass a broad spectrum of marks, symbols, design elements and characters” that the public associates with a “product” or a producer. *Warner Bros. I*, 658 F.2d at 76, 78. But the mental association necessary for secondary meaning must occur between a mark and a producer. See supra note 532. The opinion also downplayed the power of proper labelling to dispel any source confusion that might otherwise have arisen. *See Warner Bros. I*, 658 F.2d at 78, 79.
547. While the ability to protect nonfunctional design features that had acquired secondary meaning under Lanham Act § 43(a) was not seriously in doubt at this period, see supra notes 530-38 and accompanying text, the ability to protect the overall shape of a product under § 43(a), even when it had acquired secondary meaning, remained controversial owing to the express application of the *Sears-Compco* decisions to product configurations. See, e.g., Petersen Mfg. Co. v. Central Purchasing, Inc., 740 F.2d 1541, 1549-50 & n.10 (Fed. Cir. 1984) (recognizing the uncertain status of overall product shapes as trademarks under § 43(a) and looking to the law of the regional circuits in particular cases).
548. 248 U.S. 215, 239 (1918) (only Supreme Court decision to suggest that slavish imitation in itself might constitute the tort of “misappropriation”).
549. This panel’s open appeal to *International News Service* and its misappropriation rationale was manifestly too forthright to exert any lasting influence. See, e.g., *Compco*, 376 U.S. 234; *Sears*, 376 U.S. 225 (confirming thesis of *Kellogg* and rejecting quasi-property interest in products of skilled efforts as such); *Kellogg Co. v. National Biscuit Co.*, 305 U.S. 111 (1938) (rejecting broad misappropriation rationale of *International
Apart from these unsettled constitutional issues, the first *Warner Brothers* decision ignored a long-standing technical doctrine, known as aesthetic functionality, that might have compelled a different result. This doctrine, borrowed from the Ninth Circuit, had traditionally disqualified a distinctive or fanciful design from protection as a mark if its aesthetic qualities made that design "an important ingredient in the commercial success of the product" itself. When the Ninth Circuit appeared to retreat from its own doctrine of aesthetic functionality that very same year, it became clear that two of the country's foremost intellectual property tribunals had singled out the legality of product simulation under section 43(a) as a means of relieving some of the pressure generated by the failure of Congress to enact a special design law in 1976.

### a. Product Configurations as Pseudo Trade Dress

These portents were confirmed in 1983 when the Court of Appeals for

---


550. The aesthetic functionality doctrine created a presumption that ornamental designs of useful articles served to enhance the sales appeal of products and not to identify their producer at all. If so, they remained legally "functional" and thereby unprotected in trademark and unfair competition law even though they lacked the attributes of utilitarian functionality and had acquired secondary meaning. See, e.g., Pagliero v. Wallace China Co., 198 F.2d 339, 343 (9th Cir. 1952); Brown, supra note 32, at 1367-68. See generally Duft, "Aesthetic" Functionality, 73 Trademark Rep., 151, 151-53, 167-203 (1983); Oddi, *The Functions of "Functionality" in Trademark Law*, 22 Hous. L. Rev. 925, 931-33, 951-63 (1985). The doctrine of aesthetic functionality thus reinforces the competitive balance entrusted to the design patent and copyright laws, whose terms of duration are constitutionally limited in time. See, e.g., Duft, supra note 550, at 151 (citing cases). A parallel exists between the exclusion of industrial designs from trademark and unfair competition law by dint of their aesthetic functionality and the exclusion of similar designs from copyright law due to the separability doctrine after 1958.

551. See, e.g., *International Order of Job's Daughters v. Lindeburg & Co.*, 633 F.2d 912, 917 (9th Cir. 1980), cert. denied, 452 U.S. 941 (1981); Pagliero, 198 F.2d at 343 (holding floral designs on tableware functional because they "satisf[y] a demand for the aesthetic as well as for the utilitarian," and stating that public interest requires free competition in regard to unpatentable design features that are "an important ingredient in the commercial success of the product" (citing *Restatement of Torts* § 742 (1938)); see also supra note 550.

552. See *Vuitton et Fils S.A. v. J. Young Enters., Inc.*, 644 F.2d 769 (9th Cir. 1981) (narrowing Pagliero); see also *Fabrica, Inc. v. El Dorado Corp.*, 697 F.2d 890 (9th Cir. 1983); infra notes 553-71.
the Ninth Circuit handed down *Fabrica, Inc. v. El Dorado Corp.* 553 Initially, this decision held that the design of a folder used to display samples of carpeting fabrics was inseparable from the utilitarian article embodying it and therefore ineligible for copyright protection. 554 In this respect, the Ninth Circuit belatedly endorsed the restrictive interpretation of separability that both the District of Columbia Circuit and the Eleventh Circuit had approved. 555 With this task accomplished, however, the panel proceeded to find that the noncopyrightable design of the folder amounted to protectable trade dress within section 43(a) of the Lanham Act. 556

That section 43(a) covered unregistered trade dress was, by 1983, unexceptionable in itself. 557 In the past, however, the Ninth Circuit had taken pains to distinguish between an *article* of commerce, which could be freely imitated, and the *package* in which the article was marketed, which could not. 558 The design of the folder at issue in *Fabrica* served *both* as a package, in that it displayed the plaintiff's carpet samples to the public, and as a product, in that any other carpet company could use a similar folder to display its own carpet samples to its own customers. Because the defendant had imitated the folder in conjunction with its own carpet samples, the litigation arguably concerned the configuration of a product rather than a package in the conventional sense of the term. 559

The panel nonetheless decided that the overall design of the folder constituted a form of trade dress, which a competitor could not copy without confusing consumers about the source of the carpet itself. 560 This and similar decisions thus began to stretch the notion of trade dress to the point where prior distinctions between "package" or "container" and "product configuration" became blurred and hardly worth defending. 561

---

553. 697 F.2d 890 (9th Cir. 1983).
554. Id. at 892-94 (denying copyright protection to the three-dimensional design of a display folder because it contained no features that could "be separated out" or that could "exist independently of their utilitarian features").
555. Id. at 892-94; see *supra* notes 369-74 and accompanying text.
556. *Fabrica*, 697 F.2d at 892.
559. The defendant tried valiantly to make this point, arguing that "the carpet sample folders are not really trade dress, but constitute products in and of themselves." *Fabrica*, 697 F.2d at 895. But the court confused the issue by talking about the effect of the folder design on consumers of carpets rather than on carpet manufacturers who comprised the market for carpet display folders as such. Id.
560. Id. at 895 (stating that the display folders are advertising materials that "aid consumers in selecting the actual product—the carpeting"); see *supra* note 559. Query, how consumers would be confused about the source of the carpeting if another firm displayed its own carpet samples, clearly marked with its own brand name and symbols, in a comparable display folder whose secondary meaning was never mentioned in the opinion?
561. See, e.g., J. GILSON, *supra* note 538, § 7.02[3][a] (stating that the distinction is no longer material); Brown, *supra* note 32, at 1358 (criticizing such a move).
Assimilating product configurations to trade dress,\textsuperscript{562} although analytically strained,\textsuperscript{563} yielded two technical advantages. First, it reduced tensions with positive intellectual property law because section 43(a) applied expressly to "containers for goods." Indeed, most courts and commentators now believed that the protection of trade dress under section 43(a) would not conflict with either \textit{Sears-Compeo}\textsuperscript{564} or section 301(a) of the Copyright Act of 1976.\textsuperscript{565}

562. "Most trade dress infringement actions involve the packaging or labeling of goods. Recently, however, courts have recognized that the design of a product itself may constitute protectable trade dress under § 43(a) of the Lanham Act." John H. Harland Co. v. Clarke Checks, Inc., 711 F.2d 966, 980 (11th Cir. 1983) (citations omitted) (holding noncopyrightable design of bank checks to be protectable trade dress under § 43(a)). The first case to adopt this tactic for this purpose was reportedly Truck Equip. Serv. Co. v. Fruehauf Corp., 536 F.2d 1210 (8th Cir. 1976) (holding exterior design of semi-trailer truck to be trade dress protectable against copying under Lanham Act § 43(a), cert. denied, 429 U.S. 861 (1976); see also 1 J. Gilson, supra note 538, § 7.02[2][a]; id. § 2.13[1] (noting that federal unfair competition law under § 43(a) has "supplanted" the protection of product configurations and of "overall trade dress" in state common law); Note, \textit{Trade Dress Infringement}, supra note 528, at 77, 79, 82-83.

563. If the product comes in a package or container and its configuration is also viewed as trade dress, then every product has at least two trade dresses as a result of this approach. More to the point, the tactic undermines any statutory design protection scheme in force. See infra notes 725-45 and accompanying text.

564. See supra note 562. The \textit{Sears} opinion had declared that state unfair competition law could continue to protect "distinctive dress in the packaging of goods." \textit{Sears, Roe-buck \& Co. v. Stiffel Co.}, 376 U.S. 225, 232 (1964). States could also require adequate labeling to prevent source confusion. \textit{Id}. The \textit{Compeo} opinion had recognized that "other federal statutory protection" remained concurrently applicable. Compeo Corp. v. Day-Brite Lighting, Inc., 376 U.S. 234, 238 (1964). If state laws could still regulate trade dress and if other federal statutory havens were not precluded, then protecting commercial designs as trade dress was arguably not inconsistent with \textit{Sears-Compeo}. See, e.g., SK&F Co. v. Premo Pharmaceutical Laboratories, Inc., 625 F.2d 1055, 1065-66 (3d Cir. 1980); Truck Equip., 536 F.2d 1210; Note, \textit{Trade Dress Infringement}, supra note 528, at 82-85. See generally Drahler, \textit{Trademark Protection for Industrial Designs}, 1988 U. ILL. L. REV. 887, 916-37 (1988); Schuman, \textit{Trademark Protection of Container and Package Configurations—A Primer}, 59 CHI.-KENT L. REV. 779, 790-92 (1983). But see \textit{Sears}, 376 U.S. at 231-32 (apparently limiting the confusion rationale as a basis for "an injunction against ... copying that which the federal patent laws permit to be copied," and stressing that "[s]haring in the goodwill of an article unprotected by patent or trademark is the exercise of a right protected by all"); Kellogg Co. v. National Biscuit Co., 305 U.S. 111, 122 (1938) (a major precedent in \textit{pre-Erie}, federal unfair competition law). For the view that the trademark and unfair competition laws, state or federal, are not to disrupt the federal intellectual property scheme by affording protection against copying to subject matter that Congress has declined to protect, see, e.g., Meyer, supra note 528, at 105; cf. Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141 (1989).

565. In principle, the separability test of copyright law, see supra notes 20-21 and accompanying text, was perfected in § 301 of the 1976 Copyright Act, which codified basic premises of the \textit{Sears-Compeo} decisions. See 17 U.S.C. § 301 (1988). Section 301 arguably preempted the protection of noncopyrightable industrial designs under state unfair competition laws sounding in misappropriation as such. See, e.g., Gemveto Jewelry Co. v. Jeff Cooper, Inc., 800 F.2d 256 (Fed. Cir. 1986); Durham Indus., Inc. v. Tomy Corp., 630 F.2d 905 (2d Cir. 1980) (preempting state unfair competition claim where copyright claim on same design was invalidated for lack of originality); cf. John
Second, not even ardent judicial partisans of aesthetic functionality, such as the Ninth Circuit, had ever applied this doctrine to packaging or true trade dress, because consumers did not buy packages for their own sake. By insisting that the display folder at issue in Fabrica was trade dress and not a product configuration, the panel hinted that it did not need to invoke aesthetic functionality at all. Lest critics object that it had wrongly distinguished trade dress from trademarks on the facts of this case, moreover, the panel stated its belief that the Ninth Circuit was unlikely to apply aesthetic functionality even to product configurations in the future because this doctrine no longer served any useful purpose.

By treating a product configuration as pseudo trade dress, in other words, this and other federal appellate courts had quite deliberately begun to transform the very three-dimensional designs of useful articles that the Copyright Act of 1976 had banished to the public domain into unregistered trademarks protectable in perpetuity under an evolving federal law of unfair competition.

H. Harland Co. v. Clarke Checks, Inc., 503 F. Supp. 146 (D.D.C. 1980) (holding that state laws of unfair competition were not preempted by § 301 where they required proof of nonequivalent rights sounding in the confusion or deception rationales), aff'd on other grounds, 711 F.2d 966 (11th Cir. 1983). See generally 2 P. Goldstein, supra note 28, at 471-502, 553-62, 573-85; Abrams, supra note 549, at 537-66. However, § 301(d) of the 1976 Act expressly exempted "any rights or remedies under any other Federal statute" from the preemptive sweep of § 301(a). Federal rights legitimately arising under Lanham Act § 43(a) are therefore not preempted by § 301(a) of the copyright law or by the residual impact of Sears-Compco unless there is some inherent conflict between the two equally valid federal statutes that requires reconciliation. See, e.g., Meyer, supra note 528, at 105 & n.174 (arguing that "[i]mporting the misappropriation doctrine into § 43(a) frustrates the stated purpose of the preemption statute . . . by threatening to create a parallel system of rights equivalent to copyright").

566. See, e.g., International Order of Job's Daughters v. Lindeburg & Co., 633 F.2d 912, 917 (9th Cir. 1980); Pagliero v. Wallace China Co., 198 F.2d 339 (9th Cir. 1952); supra note 550. But see Vuitton et Fils S.A. v. J. Young Enters., Inc., 644 F.2d 769, 773 (9th Cir. 1981) (declining to apply aesthetic functionality bar to distinctive and decorative designs of luggage and handbags).

567. "[T]his court has specifically limited application of the Pagliero functionality test to product features and has refused to apply the test to cases involving trade dress and packaging." Fabrica, 697 F.2d at 895 (citing Audio Fidelity, Inc. v. High Fidelity Recordings, Inc., 283 F.2d 551 (1960)).

568. See, e.g., Duft, supra note 550, at 191-92 (stressing that "in the case of product design, the potential exists for an absolute prohibition against copying and manufacturing . . . a particular good formed in a particular way").

569. Fabrica, 697 F.2d at 895-96.

570. "This court . . . has specifically rejected the notion that a design feature is functional by definition if it increased appeal and sales of the product." Id. at 896 (citing Vuitton et Fils, 644 F.2d 769). That aesthetic functionality had ceased to interest the Ninth Circuit was confirmed expressly in a subsequent decision. See First Brand Corp. v. Fred Meyer, Inc., 809 F.2d 1378, 1382 n.3 (9th Cir. 1987) (dictum); see also infra text accompanying notes 608-33. It followed that only the utilitarian functionality test could henceforth disqualify design features that otherwise met the requirements of § 43(a) regardless of whether these features pertained to a product or to the trade dress of a product. See Fabrica, 697 F.2d at 896.

571. See supra notes 540-50, 562.
b. A Revisionist View of Utilitarian Functionality

Meanwhile, in a series of decisions that continued up to its demise in 1982, the Court of Customs and Patent Appeals (C.C.P.A.) had been making it harder for the Patent and Trademark Office to invoke utilitarian functionality as grounds for refusing to register three-dimensional product and container designs as trademarks on the Principal and Supplementary Registers. Nonfunctionality became the chief obstacle to actual registration once product and container designs had qualified as eligible subject matter in the period 1958 to 1964.

Historically, the nonfunctionality requirement excluded candidate marks that served a mechanical purpose or that otherwise contributed to the efficiency, utility, or aesthetic commercialization of a product, regardless of any secondary meaning such marks may have acquired or of their inherent distinctiveness. Nonfunctionality thus prevented trade-
mark and unfair competition laws, whether state or federal, from undermining the patent system and from hindering free competition,\textsuperscript{580} policies that acquired constitutional underpinnings in the \textit{Sears-Compeo} decisions of 1964.\textsuperscript{581} However, the Court of Customs and Patent Appeals believed that nonfunctionality as traditionally interpreted overemphasized a competitor’s right to copy at the expense of a producer’s right “to protect . . . [his] method of trade identification” and of the public interest in stimulating product differentiation.\textsuperscript{582}

As the C.C.P.A. explained in its \textit{Morton-Norwich} decision of 1982,\textsuperscript{583} most three-dimensional configurations would necessarily affect the performance or efficiency of the products embodying them merely because of their utilitarian nature.\textsuperscript{584} Yet, registering these configurations as marks would seldom hinder competition in practice if courts took pains to separate source-identifying features from the functional components of the products in question.\textsuperscript{585} This conclusion followed from the premise that the number of arbitrary design features capable of source identification—despite some incidental functional attributes—was large, while the number of critically functional features also capable of source identification was small.\textsuperscript{586} To
allow competitors to copy design features that had acquired secondary meaning, perhaps as the result of costly advertising campaigns, because they contributed to the utility or efficiency of a product without more thus converted nonfunctionality into a formula that encouraged consumer confusion and the appropriation of unearned good will to boot.587

The Court of Customs and Patent Appeals accordingly began to distinguish between package and product designs that were descriptively or "de facto functional" in that they pertained to useful articles and those deemed "de jure functional," which would not be allowed to register even if capable of source identification.588 To establish legal or de jure functionality, it would not suffice that the design component, viewed in isolation, contributed to the efficiency of the underlying product or affected its utility, or even that the number of alternative shapes available to competitors was relatively limited.589 Rather, the court proposed to disqualify an otherwise eligible design only if, viewed as a whole, it was demonstrably "superior in function . . . or economy of manufacture" and for this reason had to be copied as a competitive fact of life.590 If, in sum, a source-identifying product configuration or package did not amount to "the best or one of a few superior designs available," the C.C.P.A. would not allow the trademark authorities to deny it registration without evidence that the maintenance of effective competition in a given product area required a higher standard of nonfunctionality.591

The Court of Customs and Patent Appeals thus favored a nonfunctionality doctrine for purposes of trademark law that resembled the nonfunctional to copy them, even if some incidental function is associated with them"). The hard cases fell in between these two poles. See Pegram, supra note 532, at 339-40.

587. See Morton-Norwich, 671 F.2d at 1342-43 ("If the functions of appellant's bottle can be performed equally well by containers of innumerable designs and, thus, no one is injured in competition, why did the board state that appellant's design is functional and for that reason not registrable?") (emphasis in original); supra note 586; see also Duft, supra note 550, at 158 (stressing twin evils of increasing consumer confusion and allowing unnecessary "infringing upon [a design] owner's trade"); cf. Truck Equip. Serv. Co. v. Fruehauf Corp., 536 F.2d 1210, 1218 (8th Cir. 1976) (cited with approval in Morton-Norwich, 671 F.2d at 1339). But see Brown, supra note 32, at 1361 & n.90, (criticizing Truck Equip. for its reliance in part on a misappropriation rationale).

588. See Morton-Norwich, 671 F.2d at 1337. But see Brown, supra note 32, at 1369 n.126 (criticizing this distinction as unhelpful jargon).

589. Morton-Norwich, 671 F.2d at 1338-43.

590. Id. at 1338-39, 1341; see also Duft, supra note 550, at 158; Oddi, supra note 550, at 941-42.

591. Morton-Norwich, 671 F.2d at 1339-41 ("superiority of design" test rests upon the "essential to effective competition" foundation, citing Ives Laboratories, Inc. v. Darby Drug Co., 601 F.2d 631, 643 (2d Cir. 1979)); see also Pegram, supra note 532, at 342 (stating that "the effect on competition issue was viewed by the court as the crux of its analysis"). The Morton-Norwich court acknowledged the continued relevance of assessing whether the design "was created primarily with an eye toward the utility of the article" or primarily for source identification, when evaluating the lack of distinctiveness in relation to functionality. Morton-Norwich, 671 F.2d at 1343 (emphasis in original). But a "nondistinctive design does not necessarily equal a 'functional' design," id. at 1343, and the functionality bar nonetheless requires a finding that the design be "functionally or economically superior." Id. at 1342.
tionality standard that the Court of Appeals for the Federal Circuit would later introduce into design patent law.\textsuperscript{592} In either case, a plaintiff could parry the charge that his design was “dictated by function”\textsuperscript{593} by recourse to a “multiplicity of forms” test that allowed him to prove that the defendant could compete effectively without imitating the protected form.\textsuperscript{594} As applied to the facts in the \textit{Morton-Norwich} case of 1982,\textsuperscript{595} this approach recognized that a product or container design could indicate the source of manufacture while contributing to the utility of the underlying product,\textsuperscript{596} much as a patentable ornamental design could improve the appearance of an article whose utility it simultaneously enhanced.\textsuperscript{597}

In effect, the revisionist test of utilitarian functionality formulated in \textit{Morton-Norwich}, coupled with a disdain for the aesthetic functionality doctrine also manifested in 1982,\textsuperscript{598} meant that the C.C.P.A. had narrowed the general requirement of nonfunctionality governing the registration of all product and container configurations\textsuperscript{599} without even mentioning the \textit{Sears-Compco} decisions of 1964.\textsuperscript{600} It followed that “the more functionality

\begin{itemize}
\item \textsuperscript{592} See supra text accompanying notes 269-302.
\item \textsuperscript{593} See supra note 591; \textit{Morton-Norwich}, 671 F.2d at 1342 (stating that, while “the overall composite design comprising both bottle and spray top . . . must be accommodated to the functions performed, we see no evidence that it was dictated by them and resulted in a functionally or economically superior design of such a container”) (emphasis in original); see also Duft, supra note 550, at 158 n.28 (stating that “dictated by functional considerations” has to mean that “the design must be the way it is lest its superiority (in utility or economy of manufacture) be diminished”).
\item \textsuperscript{594} See, e.g., \textit{Morton-Norwich}, 671 F.2d at 1342-43 (finding that competitors “had no need to simulate appellant's trade dress, in whole or in part, in order to enjoy all of the functional aspects of a spray top container”); supra note 587. For the “multiplicity of forms” test in United States design patent law after 1982, see supra notes 269-302 and accompanying text.
\item \textsuperscript{595} \textit{Morton-Norwich}, 671 F.2d 1332 (holding that registration of a container configuration for a plastic spray bottle was not barred by the functionality rule, despite existence of a design patent on the same configuration and of a utility patent on the spray mechanism, and remanding for determination of distinctiveness or secondary meaning).
\item \textsuperscript{596} See, e.g., Pegram, supra note 532, at 341 (noting that the design at issue fell “in the middle of the range between one entirely determined by function . . . and an arbitrary one”).
\item \textsuperscript{597} See supra text accompanying notes 280-302.
\item \textsuperscript{598} See \textit{In re DC Comics, Inc.}, 689 F.2d 1042 (C.C.P.A. 1982) (declining to apply broad aesthetic functionality doctrine to two-dimensional configurations of dolls); Oddi, supra note 550, at 949-53.
\item \textsuperscript{599} See, e.g., Pegram, supra note 532, at 341-42 (stating that \textit{Morton-Norwich} “clarified . . . and appeared to liberalize” the “law applicable to registration of product configurations,” although the case “involved the shape of a spray container used for cleansers”). The court repeatedly stressed the extent to which its formula applied to both container and product configurations. See \textit{Morton-Norwich}, 671 F.2d at 1337-38, 1342. At the outset of the opinion, however, there is a curious disclaimer “that this is not a 'configuration of goods' case.” \textit{Id.} at 1336 (emphasis in original). Whatever distinction the court initially had in mind was thus lost in its general doctrinal reformulation, even though the new formula might be applied differently on a different set of facts.
\item \textsuperscript{600} See supra notes 562-65 and accompanying text. \textit{But cf. DC Comics}, 689 F.2d at 1052-53 (Nies, J., concurring) (discussing the interrelatedness of federal trademark, patent, and copyright laws pertaining to designs of useful articles).
could be circumscribed, the more design features would be nonfunctional and protectable.\textsuperscript{601} The formula adopted by Judge Rich in Morto n-Norwich thus invited the Court of Appeals for the Federal Circuit, which took office a few months later,\textsuperscript{602} to permit registration of numerous three-dimensional configurations that would have failed the utilitarian functionality test only a decade or so earlier.\textsuperscript{603}

Ironically, the Federal Circuit has shied away from implementing the broadest implications of Morton-Norwich,\textsuperscript{604} and in a prophetic aside, it warned that the Supreme Court had never rescinded the application of Sears-Compco to three-dimensional designs of useful articles.\textsuperscript{605} Outside the Federal Circuit, however, the C.C.P.A.'s pioneer decision concerning registered marks in 1982\textsuperscript{606} profoundly influenced other federal appellate courts to relax the few remaining doctrinal barriers still limiting the protection of package and product designs as unregistered trademarks under section 43(a) of the Lanham Act.\textsuperscript{607}

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{601} Brown, supra note 32, at 1361. The Supreme Court, in dictum, provided another definition of functionality that same year: "In general terms, a product feature is functional if it is essential to the use or purpose of the article or if it affects the cost or quality of the article." Inwood Laboratories, Inc. v. Ives Laboratories, Inc., 456 U.S. 844, 850 n.10 (1982). But the Court did not resolve the functionality issue before it, another definition in a concurring opinion was quite different, and the dictum in Inwood Laboratories was but "one of several competing views of the meaning of functionality." Brown, supra note 32, at 1361-62.
\item \textsuperscript{602} See supra note 141 and accompanying text.
\item \textsuperscript{603} Compare, e.g., In re Honeywell, Inc., 532 F.2d 180 (C.C.P.A. 1976) (denying application to register the configuration of a round thermostat cover as a trademark on grounds of functionality and noting that thermostat was covered by expired design patent plus two utility patents) with In re Honeywell, Inc., 8 U.S.P.Q.2d (BNA) 1600 (PTO Trademark Tr. & App. Bd. 1988) (reversing examiner's decision to deny registration to slightly different configuration of thermostat cover, despite limited number of alternative designs, because examiner had not demonstrated de jure functionality under Morton-Norwich); see also In re Bose Corp., 772 F.2d 866, 872 (Fed. Cir. 1985); Pegram, supra note 532, at 341-44; Oddi, supra note 550, at 943 (citing cases).
\item \textsuperscript{604} See, e.g., Power Controls Corp. v. Hybrinetics, Inc., 806 F.2d 234 (Fed. Cir. 1986) (holding clam shell package for dimmer switch functional for purposes of Lanham Act § 43(a)); Cable Elec. Prods., Inc. v. Genmark, Inc., 770 F.2d 1015 (Fed. Cir. 1985) (holding loudspeaker enclosure functional for purposes of § 43(a)); see also Textron, Inc. v. United States Int'l Trade Comm'n, 753 F.2d 1019 (Fed. Cir. 1985); In re Teledyne Indus., Inc., 696 F.2d 968 (Fed. Cir. 1982). But see Black & Decker, Inc. v. Hoover Serv. Center, 886 F.2d 1285 (Fed. Cir. 1989) (holding that lower court erred in finding wedge-shaped bowl of vacuum cleaner functional under § 43(a) without evaluating defendant's ability to compete using other forms and without evidence of confusion). As regards unregistered marks that happen to reach the Federal Circuit in connection with matters exclusively within its jurisdiction, the court formally applied the law of the circuit in which the case arose.
\item \textsuperscript{605} See Litton Sys., Inc. v. Whirlpool Corp., 728 F.2d 1423, 1448 (Fed. Cir. 1984). For the fulfillment of the court's premonitions concerning Sears-Compco, see Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141 (1989); infra text accompanying notes 713-24.
\item \textsuperscript{606} See supra notes 598-603.
\item \textsuperscript{607} See infra text accompanying notes 608-705.
\end{itemize}
\end{footnotesize}
c. Eclipse of the Aesthetic Functionality Doctrine

The more that the Morton-Norwich view of utilitarian functionality seduced other circuits applying section 43(a) of the Lanham Act, the more these courts balked at the idea of penalizing commercially successful appearance designs for their aesthetic functionality.608 If the relaxed test of utilitarian functionality applied without regard to commercial success, few package or product designs that had acquired secondary meaning would ever look so technically or economically superior as to necessitate copying for competitive purposes.609 Yet, critics of aesthetic functionality posited that the pool of appearance designs capable of indicating origin was potentially unlimited, whereas the corresponding pool of technically proficient designs also capable of source identification was not.610 To allow the broad aesthetic functionality doctrine to exclude most commercially successful appearance designs while courts implementing the revisionist view of utilitarian functionality no longer disqualified even technically significant designs thus appeared to yield a paradoxical result. It afforded greater deference to the border between trademark and design patent law than to the economically more important border separating trademarks from utility patents.611

Such reasoning tends, however, to obscure the different policies underlying utilitarian and aesthetic functionality by overemphasizing the notion of “functionality” as their common denominator. A lowering of the utilitarian functionality barrier has no necessary or logical bearing on the height of the aesthetic functionality barrier so long as commercial success adversely affects both highly functional and not very functional product configurations on the same independent grounds. Those who think commercial success irrelevant then ignore the competitive mandate underlying the congressional decision not to afford sui generis protection to industrial designs in 1976,612 as if the federal trademark and unfair competition laws constituted a world apart.

Perhaps to cover this nakedness, courts and commentators seeking to justify a protectionist bent now discovered that the aesthetic functionality doctrine had led all along to a socially undesirable result. The more that

608. See, e.g., Warner Bros. v. Gay Toys, Inc., 724 F.2d 327, 331 (2d Cir. 1983) [Warner Bros. II] (approving Morton-Norwich view of utilitarian functionality and declining to apply aesthetic functionality bar); infra notes 610, 613-30 and accompanying text; see also Dratler, supra note 564, at 941.

609. See supra notes 588-603 and accompanying text.

610. See, e.g., Sicilia Di R. Biebow & Co. v. Cox, 732 F.2d 417, 429 (5th Cir. 1984); John J. Harland Co. v. Clarke Checks, Inc., 711 F.2d 966, 982-83 n.27 (11th Cir. 1983); Dufit, supra note 550, at 181, 202.

611. See, e.g., Dratler, supra note 564, at 941 (identifying aesthetic functionality as inadequate attempt to mediate tension between design patent law and trademark law).

612. See, e.g., Bauer, supra note 534, at 725 n.219 (concluding that trademark law need not defer to patent law because the trademark law promotes creativity and investment!). But see Brown, supra note 32, at 1383-86; Meyer, supra note 528 (responding to Bauer).
ornamental designs stimulated sales of given products because consumers appreciated their aesthetic qualities, the less eligible they became for protection as unregistered marks or dress under section 43(a) of the Lanham Act. 613 The aesthetic functionality doctrine thus discouraged investment in imaginative and attractive designs, to the detriment of the social environment and of the nation's industrial competitiveness. 614 Conversely, if courts lowered this doctrinal barrier, section 43(a) of the Lanham Act could stimulate domestic industries to improve the eye appeal of their products, 615 which was "an important element in today's competitive economy." 616

By 1984, in short, it had become fashionable to tout the social benefits of rewarding design innovation for an unlimited period of time under the federal unfair competition law even though Congress had refused to grant short-term sui generis protection for that very purpose in 1976. 617 In this climate, the Third, Fifth, Ninth, and Eleventh Circuits formed a united front in rejecting the aesthetic functionality doctrine as traditionally conceived. 618 In the Second Circuit, however, the status of this doctrine remained uncertain because two of its panels had reached opposite conclusions in the period 1983 to 1984. 619 The extent to which this prestigious court would protect commercially successful product configurations as unregistered marks only became clear in 1985, when the Second Circuit reexamined these issues in LeSportsac, Inc. v. K Mart Corp. 620

613. See, e.g., Sicilia, 732 F.2d at 427-28; Keene Corp. v. Paraflex Indus., Inc., 653 F.2d 822, 825 (3d Cir. 1981); Duft, supra note 550, at 180-83, 201-03.
615. See, e.g., Sicilia, 732 F.2d at 428 (stressing public interest in providing incentives for better appearance designs); Keene Corp., 653 F.2d at 825 (stating that "[i]t would be unfortunate were we to discourage use of a spark of originality which could transform an ordinary product into one of grace"); Schuman, supra note 564, at 803; Bauer, supra note 534, at 725 n.219 (stating that "in the long run prohibition of trademark copying will encourage creativity and investment in new products and product features").
616. Note, Broad Sweep, supra note 614, at 376 (cited in Sicilia, 732 F.2d at 428).
617. For criticism of this phenomenon, see, e.g., Brown, supra note 32, at 1358-62, 1385-86; Meyer, supra note 528, at 101-12.
618. See Sicilia, 732 F.2d at 426-30; John H. Harland Co. v. Clarke Checks, Inc., 711 F.2d 966, 982-84 (11th Cir. 1983); Fabrica, Inc. v. El Dorado Corp., 697 F.2d 890, 895-96 (9th Cir. 1983), discussed in supra text accompanying notes 553-71; Keene, 653 F.2d at 825-26.
619. Compare Industria Arredamenti Fratelli Saporiti v. Charles Craig, Ltd., 725 F.2d 18, 19-20 (2d Cir. 1984) (holding design of sofa unprotectable under Lanham Act § 43(a) because it contributed to commercial success of the product and thus violated aesthetic functionality doctrine) with Warner Bros. v. Gay Toys, Inc., 724 F.2d 327, 331 (2d Cir. 1983) (holding design of toy car identified with television series not barred by aesthetic functionality and approving nexus between narrow utilitarian functionality doctrine and narrow aesthetic functionality doctrine after Morton-Norwich).
620. 754 F.2d 71 (2d Cir. 1985) (affirming the grant of preliminary injunction against copying the overall design of lightweight luggage that qualified as unregistered mark and dress under § 43(a) of the Lanham Act).
In this opinion, a veteran panel reaffirmed the now prevalent theory that the overall design of a product, including its three-dimensional shape, could itself function as the packaging of that same product and thus qualify as "appearance trade dress." Once the "look" of any given product, viewed as a whole, had demonstrably acquired secondary meaning, section 43(a) of the Lanham Act would therefore oblige producers of competing products to differentiate their own trade dress to avoid a likelihood of consumer confusion. It followed that the defendant could not copy the overall designs of certain LeSportsac luggage for an indefinite period of time, assuming the design had acquired secondary meaning, unless he proved that it failed to meet the requirements of either utilitarian or aesthetic non-functionality. Because the luggage designs easily satisfied the revisionist test of utilitarian nonfunctionality that the Second Circuit had embraced in 1983, the defendant had only the aesthetic functionality defense to fall back on.

621. *LeSportsac*, 754 F.2d at 75 (case heard by Feinberg, Chief Judge; Kaufman, Circuit Judge; and Rosenn, Senior Judge, Third Circuit, sitting by designation); see supra notes 553-71 and accompanying text. The panel approved previous Second Circuit decisions to this effect in *Warner Bros. v. Gay Toys, Inc.*, 658 F.2d 76 (2d Cir. 1981), see supra notes 541-51 and accompanying text, and *Harlequin Enters. Ltd. v. Gulf & Western Corp.*, 644 F.2d 946 (2d Cir. 1981). It also cited *John H. Harland Co. v. Clarke Checks*, Inc., 711 F.2d 966 (11th Cir. 1983).

622. *LeSportsac*, 754 F.2d at 75, 78 (stating that the purchasing public must associate the image of the product with a single producer or source "rather than just with the product itself"). The panel thus seemed to align the Second Circuit with those circuits that require evidence of secondary meaning for product configurations eligible under § 43(a), as opposed to other circuits that will also protect both product configurations and packaging deemed to be inherently distinctive. See, e.g., J. GILSON, supra note 538, §§ 7.02[2], 7.02[2][c] (citing authorities); infra text accompanying notes 691-94.

623. *LeSportsac*, 754 F.2d at 75, 79. If the competitor merely copied a design that had already acquired secondary meaning, the trier of fact could infer a likelihood of confusion without more.

624. Unregistered trademark protection, once acquired, has no fixed duration, although it may be forfeited either through non-use for an extended period or because the mark ceases to function as a designation of origin and no longer distinguishes the goods from those of others. See, e.g., J. GILSON, supra note 538, §§ 1.03[11], 3.06. Although the notion that trademarks last forever is open to criticism, see *In re DC Comics, Inc.*, 689 F.2d 1042, 1052 (C.C.P.A. 1982) (Nies, J., concurring), the fact remains that, under ordinary circumstances, this form of protection will deter imitation of the mark for the life of the product or so long as it remains of interest to competitors. This contrasts with intellectual property rights subject to U.S. CONG. art. I, § 8 (allowing grants of exclusive rights for "limited times" only).

625. See supra note 622. Since the appeal in *LeSportsac* questioned the grant of a preliminary injunction, the case was remanded for trial on the merits as regards secondary meaning. *LeSportsac*, 754 F.2d at 78.

626. *LeSportsac*, 754 F.2d at 75-78. The Second Circuit thus sided with those courts that placed the burden of proving illicit functionality on the alleged infringer. See id. at 76 (accepting the thesis of Note, *Trade Dress Infringement*, supra note 528, at 87 n.78).

627. *LeSportsac*, 754 F.2d at 76-77 (quoting *Warner Bros. v. Gay Toys, Inc.*, 724 F.2d 327, 331 (2d Cir. 1983); *In re Morton-Norwich Prods.*, Inc., 671 F.2d 1332, 1342 (C.C.P.A. 1982)). The particular combination of design features was to be viewed as a whole and not disassembled into its component parts for purposes of the utilitarian functionality test. *LeSportsac*, 754 F.2d at 76. Under this test, nothing prevented third parties from marketing suitably differentiated products of the same general type. *Id.* at 77.
back upon, a defense that one panel of the Second Circuit had reaffirmed in *Industria Arredamenti Fratelli Saporiti v. Charles Craig, Ltd.*

By 1985, however, the Second Circuit had resolved no longer to deny trademark protection to unpatented, noncopyrightable product configurations merely because they constituted “an important ingredient in the commercial success of the product” or otherwise enhanced the “salability of the goods.” On the contrary, this panel emphatically joined the chorus of courts and commentators that had repudiated aesthetic functionality as an unwarranted disincentive to the development of imaginative and attractive designs.

Formally, to be sure, the *LeSportsac* opinion reserved the “important ingredient” test for cases in which the alleged infringer might still prove that the design in question was “primarily functional” even in the aesthetic sense. In principle, this allowed the defendant some opportunity, on remand, to show that consumers bought the luggage at issue principally because they found its overall design aesthetically pleasing, and that the capacity of the design to identify some of the goods left them indifferent. In reality, later decisions confirmed that the Court of Appeals for the Second Circuit, in the *LeSportsac* decision of 1985, had “weakened if not eliminated” the last doctrinal barrier that prevented the transformation of section 43(a) into a judge-made design protection law.

2. The Most Protectionist Design Law of Them All

The magnitude of the changing judicial approach that *LeSportsac* consecrated becomes clear when one contrasts its bold thesis with the doctrinal constraints courts had thought they labored under only a few years earlier. For example, the United States Court of Appeals for the Third Circuit,

---

628. 725 F.2d 18 (2d Cir. 1984).
629. *LeSportsac*, 754 F.2d at 77-78.
630. *Id.* at 77 (quoting Keene Corp. v. Paraflex Indus., Inc., 653 F.2d 822, 825 (3d Cir. 1981); citing with approval Vuitton et Fils S.A. v. J. Young Enters., Inc., 644 F.2d 769, 773 (9th Cir. 1981)). But see Wallace Int'l Silversmiths, Inc. v. Godinger Silver Art Co., 916 F.2d 76 (2d Cir., 1990) (rehabilitating a modified test of aesthetic functionality); infra note 721 and accompanying text.
631. *LeSportsac*, 754 F.2d at 77-78; see, e.g., Villeroy & Boch, S.a.r.l. v. THC Sys., Inc., 10 U.S.P.Q.2d (BNA) 2027 (S.D.N.Y. 1989) (finding china pattern was aesthetically functional within space left by *LeSportsac*); see also Brown, supra note 32, at 1364-65.
632. *LeSportsac*, 754 F.2d at 78.
633. See, e.g., Morex S.p.A. v. Design Inst. Am., Inc., 779 F.2d 799, 801 (2d Cir. 1985) (per curiam) (“The *Craig* standard for functionality was implicitly rejected . . . by our decision in *LeSportsac*.”); Metro Kane Imports, Ltd. v. Rowoco, Inc., 618 F. Supp. 273, 275 (S.D.N.Y. 1985), aff'd without opinion, 800 F.2d 1128 (2d Cir. 1986) (stating that, in *LeSportsac*, “the principle that an aesthetic design can be functional purely because its aesthetic quality promotes sales was weakened, if not eliminated”); see also PAF S.r.l. v. Lisa Lighting Co., 712 F. Supp. 394, 401-02 (S.D.N.Y. 1989). But see, e.g., Wallace Int'l Silversmiths, Inc. v. Godinger Silver Art Co., 916 F.2d 76 (2d Cir. 1990) (finding that silverware design was aesthetically functional because the limited range of adequate alternative designs hindered effective competition).
which had criticized the aesthetic functionality doctrine in 1981, still hesitated to protect a product configuration in federal unfair competition law out of respect for the Supreme Court’s Sears-Compeco decisions of 1964. After LeSportsac, however, most federal appellate courts overcame any residual inhibitions of this nature simply by treating the overall shape of a product as its trade dress despite the traditional view to the contrary. This magical transformation then enabled these courts to rescue unpatented, noncopyrightable product configurations from the public domain on the theory that section 43(a) of the Lanham Act implemented valid, congressionally approved federal policies of its own.

634. See Keene Corp. v. Paraflex Indus., Inc., 653 F.2d 822 (3d Cir. 1981) (declining to protect design of outdoor “architectural luminaire” under Lanham Act § 43(a) because it integrated form and function and Sears-Compeco were thought to govern); see also Prufrock, Ltd. v. Lasater, 781 F.2d 129, 133 (8th Cir. 1986) (approving aesthetic functionality doctrine and stating that “if the trade dress is an important ingredient in the commercial success of the product, it is clearly functional”).

635. The following lines from LeSportsac were widely quoted or paraphrased: “Most trade dress infringement actions involve the packaging or labeling of goods. Recently, however, we have recognized that the design of a product itself may function as its packaging, serving to distinguish it from other products, and hence be protectable trade dress under § 43(a).” LeSportsac, 754 F.2d at 75. The following cases are representative: Brunswick Corp. v. Spinit Reel Co., 832 F.2d 513, 517 (10th Cir. 1987); Vaughan Mfg. Co. v. Brikam Int’l, Inc., 814 F.2d 346, 348 n.2 (7th Cir. 1987); American Greetings Corp. v. Dan-Dee Imports, Inc., 807 F.2d 1136, 1140-41 (3d Cir. 1986); M. Kramer Mfg. Co. v. Andrews, 783 F.2d 421, 448 n.25 (4th Cir. 1986) (stating that trademark infringement focuses on “one aspect of a product’s ‘image,’” while “trade dress infringement focuses on ‘the total image of plaintiff’s product, package and advertising’” (quoting 1 J.T. McCarthy, supra note 525, § 8.1, at 282-83)).

636. See, e.g., Brown, supra note 32, at 1358, 1361 n.91 (stating that the “distinction between dress of goods (packaging and display) and the configuration of . . . useful articles . . . [is] vital”). The Third Circuit was candid in describing the legal fiction being relied on:

Attempts to incorporate protection for a product’s overall design or appearance into § 43(a) have come under a variety of guises. Some courts have found an unregistered trademark in the product’s trade dress. . . . Others simply find that copying a product’s overall trade dress or design is unfair competition. Still others have found such copying to be trade dress infringement without attempting to link it to trademark infringement or designating it a subcategory of unfair competition.

American Greetings, 807 F.2d at 1140 n.2.

637. See generally Dratler, supra note 564, at 924-35 (taking a cautious view); supra notes 562-65 and accompanying text. On this theory, nothing inherently subordinated the legitimate protection of trade dress in federal unfair competition law to the patent or copyright laws. But see Stormy Clime Ltd. v. ProGroup, Inc., 809 F.2d 971, 977-78 (2d Cir. 1987) (warning that overly broad trademark protection could undermine the objectives of the patent law and conflict with Sears-Compeco); W.T. Rogers Co. v. Keene, 778 F.2d 334, 338 (7th Cir. 1985) (stressing danger of “a collision between section 43(a) and patent law”); Brown, supra note 32, at 1360-61 & n.91 (arguing that the Supreme Court, in Sears-Compeco, had “pre-empted” product configurations from both federal and state unfair competition laws because they interfered with the patent and copyright laws and with free competition); see also Meyer, supra note 528, at 101 (overly broad trademark protection fails to separate goods from alleged mark and encroaches on domain of copyright law).
Equally revealing was the notion that the federal judiciary should help to stimulate better industrial designs by scuttling the aesthetic functionality doctrine. Because statutory encouragement of industrial design fell to the design patent law, the Second Circuit's willingness to stretch section 43(a) to protect commercial designs as trade dress implicitly criticized the level of incentives that Congress had approved in 1976. By allowing section 43(a) to provide incentives beyond those available as positive legal rights, courts following the Second Circuit's lead cooperated in establishing a provisional regime of design protection that tried to compensate for the flawed congressional outcome of 1976.

a. Functionality and the Multiplicity of Forms Revisited

The Second Circuit confirmed the deeper implications of LeSportsac in subsequent decisions handed down between 1985 and the first half of 1990. These decisions expanded the kinds of subject matter now eligible as appearance trade dress to include the designs of a shelf unit, a raincoat, and the bicycle rack denied copyright protection in Brandir. Other federal appellate courts influenced by LeSportsac soon extended the mantle of section 43(a) beyond borderline literary and artistic products, such as toy dolls, greeting cards, and magazine

638. See supra notes 613-18, 629-30 and accompanying text.
639. See, e.g., Service Ideas, Inc. v. Traex Corp., 846 F.2d 1118, 1123 (7th Cir. 1987) (contrasting public interest "in maintaining pleasing substitutes for known product brands" with producer's interest "in protecting its products' design from infringement"); Brunswick, 832 F.2d at 518-19 (stressing emphasis of LeSportsac on "protecting a producer who takes the initiative to develop innovative or imaginative designs to identify his product" and avoidance of "dissincentives to creative design"); infra notes 702-03 and accompanying text.
642. Stormy Cline Ltd. v. ProGroup, Inc., 809 F.2d 971, 974-75 (2d Cir. 1987) (conceding that design of waterproof rain jacket was protectable trade dress unless barred by functionality doctrine).
644. See, e.g., American Greetings Corp. v. Dan-Dee Imports, Inc., 807 F.2d 1136 (3d Cir. 1986) (holding design of teddy bears protectable as trade dress against unprivileged imitation if further evidence satisfied functionality test).
645. See, e.g., Roulo v. Russ Berrie & Co., 886 F.2d 931 (7th Cir. 1989) (holding that unique "feeling sensitive" line of greeting cards was protectable trade dress); Hartford House, Ltd. v. Hallmark Cards, Inc., 846 F.2d 1268 (10th Cir. 1988) (holding that line of greeting cards possessed combination of features protectable as trade dress).
covers, in order to protect commercial designs of an increasingly functional or utilitarian nature. For example, the Fourth and Fifth Circuits, respectively, found the external designs of a video game and of a medical cart to be protectable trade dress within the purview of this provision. Various panels of the Seventh Circuit found the configuration and overall designs of plastic stacking trays, folding picnic tables, insulated beverage servers, and exercise bicycles all eligible, in principle, for protection as unregistered trade dress, although there were second thoughts about the exercise bicycle in 1989. The Ninth Circuit extended trade dress protection from the interior decor of a restaurant to cantilevered industrial clamps that had been manufactured under a utility patent since the 1950s.

The Tenth Circuit protected the design of a fishing reel in 1987.

As the list of eligible subject matter encompassed ever more utilitarian design features, only the nonfunctionality requirement kept the federal trademark and unfair competition laws from protecting the very utility models in disguise that have always posed such a challenge to the design patent law. Indeed, one panel of the Second Circuit, led by Judge Newman, and another panel of the Seventh Circuit, led by Judge Posner, expressly

646. See Reader's Digest Ass'n v. Conservative Digest, Inc., 821 F.2d 800 (D.C. Cir. 1987) (holding that magazine cover was protected trade dress).
647. See Blue Bell Bio-Medical v. Cin-Bad Inc., 864 F.2d 1253 (5th Cir. 1989) (holding design of medical carts to be protectable trade dress that was not infringed); M. Kramer Mfg. Co. v. Andrews, 783 F.2d 421, 447-50 (4th Cir. 1986) (holding design of the glass panel and console of video game to be protectable trade dress that was infringed).
648. Schwinn Bicycle Co. v. Ross Bicycles, Inc., 678 F. Supp. 1336 (N.D. Ill. 1988) (holding that design of exercise bicycle was protected trade dress and infringed), vacated and remanded, 870 F.2d 1176 (7th Cir. 1989) (holding that issues of confusion and functionality required further findings); Service Ideas, Inc. v. Traex Corp., 846 F.2d 1118 (7th Cir. 1988) (holding that design of insulated beverage server was protectable trade dress and infringed); Vaughan Mfg. Co. v. Brikam Int'l, Inc., 814 F.2d 346 (7th Cir. 1987) (finding design of folding picnic table was protectable trade dress and infringed); W.T. Rogers Co. v. Keene, 778 F.2d 334 (7th Cir. 1985) (holding that configuration of plastic stacking trays was, in principle, eligible for protection, and reversing and remanding lower court's finding of functionality); see also Sun Prods. Group, Inc. v. B & E Sales Co., 700 F. Supp. 366 (E.D. Mich. 1988) (finding overall design and appearance of foldable headrest, protected by utility patent, was nonfunctional trade dress “although it greatly aided the product's sales”).
649. See Schwinn Bicycle, 678 F. Supp. 1336 (N.D. Ill. 1988), vacated and remanded, 870 F.2d 1176 (7th Cir. 1989); infra text accompanying notes 717-21.
651. Clamp Mfg. Co. v. Enco Mfg. Co., 870 F.2d 512 (9th Cir. 1989) (holding that design of cantilevered “C” clamps was protectable, nonfunctional, and infringed, despite existence of expired utility patent).
652. Brunswick Corp. v. Spinit Reel Co., 832 F.2d 513, 516 (10th Cir. 1987) (holding that particular configuration of “closed face spin-cast fishing reel” was protected as unregistered mark and infringed).
653. See supra notes 196-210 and accompanying text; Textron, Inc. v. United States Int'l Trade Comm'n, 753 F.2d 1019, 1025 (Fed. Cir. 1985) (stating that “the right to copy better working designs would, in due course, be stripped of all meaning if overall functional designs were accorded trademark protection because they included a few arbitrary and nonfunctional features”).
urged their colleagues not to vitiate the exclusionary power of the nonfunctionality doctrine at the expense of the patent law, which these jurists viewed as supreme within its proper sphere of influence. The LeSportsac manifesto thrust in the opposite direction, however, because it viewed utilitarian functionality as excluding only superior or optimal design features and because it emptied the aesthetic functionality doctrine of its former exclusionary power. It followed that once complainants demonstrated secondary meaning, the functionality doctrine as thus reformulated no longer disqualified the bulk of the highly functional designs now eligible for long-term protection in federal unfair competition law.

The Second Circuit reached this very conclusion just after LeSportsac, when it reversed a lower court’s finding of functionality in regard to the design of a shelf unit, and again when it affirmed that a high-tech design of an orange juice squeezer was not dictated by function. In 1987, the Second Circuit suggested that the same reasoning applied to the noncopyrightable design of the bicycle rack in Brandir because competitors could market numerous other bicycle racks without copying that particular form. Outside the Second Circuit, the functionality barrier crumbled after 1985 as other appellate courts influenced by LeSportsac declined to bar the designs of such objects as video games, plastic stacking letter trays, folding picnic tables, insulated beverage servers, and industrial clamps.

---

654. See Stormy Clime Ltd. v. ProGroup, Inc., 809 F.2d 971, 976-78 (2d Cir. 1987) (“Even if Stormy Clime were to have a patent on the use of horizontal shingled vents in rain-jackets, it is unlikely that it would have such monopoly power as an unregistered trademark in the shingled look would provide.”); W.T. Rogers Co. v. Keene, 778 F.2d 334, 338-39 (7th Cir. 1985) (stating that functionality defense avoids collision between § 43(a) and patent law).

655. See supra notes 624-33 and accompanying text.

656. See, e.g., Schwinn Bicycle Co. v. Ross Bicycles, Inc., 870 F.2d 1176, 1188-91 (7th Cir. 1989) (recognizing and criticizing this result); see also Brunswick, 832 F.2d at 518 (noting that both the Second and Ninth Circuits had “redefined their interpretations of functionality” and had rejected explicitly or implicitly the per se exclusion of a product feature that contributes to consumer appeal and marketability).


659. See supra text accompanying notes 515-16.

660. Brandir Int’l, Inc. v. Cascade Pac. Lumber, Inc., 834 F.2d 1142, 1148 (2d Cir. 1987). By the same token, the Southern District of New York found that certain high-tech designs of halogen desk lamps met the nonfunctionality requirement, even though their overall configurations combined functional with nonfunctional elements. See PAF S.r.l. v. Lisa Lighting Co., 712 F. Supp. 394 (S.D.N.Y. 1989); Artemide S.p.A. v. Grandlute Design & Mfg. Co., 672 F. Supp. 698 (S.D.N.Y. 1987). In these cases, the presiding judges understood the LeSportsac standard as excluding only design features that represented a superior enhancement of the use or purpose of the product, and they took the availability of alternate marketable forms largely for granted. But see the Second Circuit’s recent decision in Wallace Int’l Silversmiths, Inc. v. Godinger Silver Art Co., 916 F.2d 76 (2d Cir., 1990) (finding that aesthetic functionality applied because alternative forms were not available).

661. See, e.g., Clamp Mfg. Co. v. Enco Mfg. Co., 870 F.2d 512, 516-17 (9th Cir. 1989) (finding design of industrial clamp nonfunctional despite expired utility patent); Ser-
Sometimes an appellate panel neglected to consider functionality at all, as if the issue no longer remained of much consequence. More often, courts went through the motions of applying the superior design test as refined by *LeSportsac*, only to presume that competitors had alternate forms at their disposal without copying a configuration said to have acquired secondary meaning. This presumption followed more or less automatically from evidence that the alleged infringer intended to imitate the originator’s design and from his corresponding inability to circumstantiate any failed attempts to market a different design.

Courts in this frame of mind seldom considered the economic disabilities that might actually have prevented alleged infringers from trying to design around a protected configuration. For example, the *LeSportsac* doctrine had stressed that courts should evaluate an originator’s design as a “total image” without disassembling it into its component parts for purposes of the functionality analysis. By manipulating this apparently innocuous premise, later decisions resisted arguments suggesting that single components of a combination design might significantly enhance the utility of the products embodying them or that such components might attain the status of market standards owing to their popularity or efficiency or both.

---

662. See, e.g., *Kramer Mfg.*, 783 F.2d 421. This methodology resembled that of the Second Circuit’s first *Warner Bros.* decision in 1981. See supra notes 541-52 and accompanying text.

663. See, e.g., *Clamp Mfg.*, 870 F.2d at 516-17 (deeming commercially feasible alternatives to be available despite expired utility patent); *Service Ideas*, 846 F.2d at 1123-24 (stating that defendant could have adopted other functional features instead of copying a successful configuration); *Brunswick*, 832 F.2d at 520-21 & n.4 (finding that alternative shapes appeared to be available, despite evidence that commercial success of plaintiff’s design derived from utilitarian advantages); *Vaughan Mfg.*, 814 F.2d at 350-51 (stressing that defendant “copied a successful product lock, stock and barrel” and that “[n]o money was expended in determining which features were necessary to the function of the product”); *Hartford House Ltd.* v. *Hallmark Cards, Inc.*, 846 F.2d 1268, 1273-74 (10th Cir. 1988) (stressing infinite availability of alternative designs without imitating “overall look” of protected designs).

664. A notable exception, however, was Judge Posner’s opinion in *W.T.Rogers*, 778 F.2d 334; see infra text accompanying notes 710-11.

665. *LeSportsac*, 754 F.2d at 76-77. *LeSportsac* was followed in numerous cases including *Clamp Mfg.*, 870 F.2d 512; *Hartford House*, 846 F.2d 1268; *Service Ideas*, 846 F.2d 1118; *Brunswick*, 832 F.2d 513; *Vaughan Mfg.*, 814 F.2d 346.

666. See, e.g., *Clamp Mfg.*, 870 F.2d 512 (holding that although design of “single screw actuated pivoted clamp” was object of utility patent that had issued in 1955 and expired in 1972, and despite emphasis on utility features in advertising, the overall design was...
tarian approach similarly dissuaded courts from considering that certain appearance designs embodied ideas, methods, concepts, or marketing schemes that could constitute barriers to entry if monopolized along with the more fanciful or decorative features.667

At the limit, some courts precluded even the possibility of disqualifying product configurations on grounds of functionality unless the defendants could establish that effective competition required them slavishly to imitate the designs in question. On this approach, "if the feature enables the second comer simply to market his product more effectively, it is entitled to protection."

Even in more conservative jurisdictions, the notion that defendants had a multiplicity of noninfringing forms at their disposal paradoxically constituted a more complete answer to the functionality defense in the trade dress environment than it did in the design patent environment as administered by the Court of Appeals for the Federal Circuit.669

---

nonfunctional because defendant copied the whole configuration); Service Ideas, 846 F.2d at 1123 (design of insulated beverage server, unchanged for over thirty years, with sales of some 2.5 million units, was object of expired design patent; held nonfunctional trade dress when viewed as a combination of functional features constituting a protectable whole); Vaughan Mfg., 814 F.2d 346. But see Schwinn Bicycle Co. v. Ross Bicycle Co., 870 F.2d 1176, 1191 (7th Cir. 1989) (criticizing judicial emphasis on failure to research alternative designs or to conduct cost studies as flawed analysis because it overlooks "the required ultimate question of whether [defendant] . . . . would be able to 'effectively' compete if it used an alternative design."), vacating and remanding 678 F. Supp. 1336 (N.D. Ill. 1988); see also W.T. Rogers, 778 F.2d at 345-48 (questioning whether design of plastic stacking letter tray had become market standard).

667. See, e.g., Roulo v. Russ Berrie & Co., 886 F.2d 931 (7th Cir. 1989) (holding that overall design of nonoccasion emotional greeting cards combined functional and nonfunctional features into protectable whole that could not be emulated); Brunswick, 832 F.2d at 520-21 (holding that although plaintiff had developed concept of closed-face spin-cast fishing reel and had dominated market with unique product since 1954, his design was nonfunctional when viewed as a whole, and it was "unnecessary for the district court to perform a feature-by-feature functionality analysis"); Fuddruckers, Inc. v. Doc's B.R. Others, Inc., 826 F.2d 837, 842 (9th Cir. 1987) (finding interior decor of restaurant was nonfunctional trade dress when viewed as a whole, even though it included functional elements); Vaughan Mfg., 814 F.2d at 348, 350 (finding design of folding picnic table was nonfunctional when viewed as a whole, despite plaintiff's dominant market position and noting competitors selling significantly different tables "continue to comprise only a small portion of the market"). But cf. 17 U.S.C. § 102(b) (1988) (excluding copyright protection of ideas, methods, and the like).

668. Brunswick, 832 F.2d at 519 (fishing reel); see also Hartford House, 846 F.2d at 1274 (defendant could "compete effectively without having to slavishly copy or imitate the distinctive combination of features comprising plaintiff's line" of greeting cards); Service Ideas, 846 F.2d at 1123-24 (invoking an insulated beverage server); Vaughan Mfg., 814 F.2d at 350 (stating that "[i]t strains the imagination to assert that someone designing such a table from scratch would ineluctably choose . . . [the identical design features] or that one seeking to buy a folding picnic table would necessarily prefer such a table over all others"). This approach followed in large part from a reading of the functionality requirement that excluded only superior, optimal, or "the best possible" design solutions, in keeping with Morton-Norwich and LeSportsac. But see Schwinn Bicycle, 870 F.2d at 1189 (criticizing this methodology).

669. Compare authorities cited supra notes 663, 667-68 with authorities cited supra notes 269-302 (multiplicity of forms in context of design patent law). A paradox arises...
b. Secondary Considerations Without Nonobviousness

Not all courts took the same approach, to be sure, nor was it axiomatic that every product configuration masquerading as trade dress would automatically benefit from a kid-gloved application of the nonfunctionality requirement between 1985 and the first half of 1990. In fact, a number of panels in different federal appellate jurisdictions continued to use the nonfunctionality test to deny or retard protection for sundry commercial designs seeking a refuge from competition under section 43(a) of the Lanham Act.670 One should remember, however, that nonprotection of product configurations on grounds of functionality had been the norm, and not the exception, until Morton-Norwich and LeSportsac undertook to reshape the relevant legal methodology in the period 1982 to 1985.671 What strikes the investigator reviewing the post-LeSportsac decisions, therefore, is the rapidity with which a protectionist line gained ascendancy notwithstanding the woolly doctrinal formulations it proclaimed672 and the solid pockets of

---

670. See, e.g., Wallace Int'l Silversmiths, Inc. v. Godinger Silver Art Co., 916 F.2d 76 (2d Cir. 1990); Schwinn Bicycle, 870 F.2d at 1189-91, discussed in infra text accompanying notes 717-21; Rachel v. Banana Republic, Inc., 831 F.2d 1503 (9th Cir. 1987) (holding that design of synthetic animal heads was functional because critical features conferred the actual benefit the consumer wanted to purchase as distinct from source identifying features); Inverness Corp. v. Whitehall Laboratories, 819 F.2d 48, 51 (2d Cir. 1987) (remanding to determine if design of roll-on hair remover was functional); First Brands Corp. v. Fred Meyer, Inc., 809 F.2d 1378, 1381-83 (9th Cir. 1987) (holding that yellow-coloured, F-shaped design of antifreeze container was functional); Stormy Clime Ltd. v. ProGroup, Inc., 809 F.2d 971 (2d Cir. 1987); American Greetings Corp. v. Dan-Dee Imports, Inc., 807 F.2d 1136, 1141-43 (3d Cir. 1986) (finding design of teddy bear with "tummy graphics" could be functional; only clear labelling may be required, and neither standard configuration nor marketing method should be removed from public domain); Standard Terry Mills, Inc. v. Shen Mfg. Co., 803 F.2d 778 (3d Cir. 1986) (finding weave and pattern of imported towel were functional; both utilitarian and modified aesthetic functionality invoked); Sno-Wizard Mfg., Inc. v. Eismann Prods. Co., 791 F.2d 423, 426 n.3 (5th Cir. 1986) (deeming design of machine to make ice shaving desserts probably functional, in dicta, because optimal in engineering sense and changes would have economic or functional drawbacks); Prufrock Ltd. v. Lasater, 781 F.2d 129, 133-35 (8th Cir. 1986) (holding that interior design of restaurant was "core concept" excluded by functionality doctrine); see also W.T. Rogers, 778 F.2d at 345-47, discussed in infra text accompanying notes 720-21, 754-63; Textron, Inc. v. United States Int'l Trade Comm'n, 753 F.2d 1019, 1026-27 (Fed. Cir. 1985) (holding that overall configuration of milling machine was functional, although curved design of the column and ram could be protected as mark if inherently distinctive or if it had acquired secondary meaning).

671. See supra text accompanying notes 572-633.

672. See, e.g., Brunswick, 832 F.2d at 518 ("Despite their criticism of the 'important ingredient' formulation, neither court [i.e., the Second and Ninth Circuits] clearly stated a test to be used for functionality.").
resistance it encountered.\textsuperscript{673} Egged on by the fashionable commentaries, the federal judiciary's basic attitude concerning unregistered product configurations changed almost overnight from one that viewed imitation as the lifeblood of commerce to one that stigmatized "unprivileged imitation" as parasitical conduct leading to unhealthy market conditions.\textsuperscript{674}

In this protectionist atmosphere, the functionality test continued to raise the same issues as before, issues not dissimilar from those that had always vexed the design patent law.\textsuperscript{675} Moreover, courts increasingly addressed these issues in the trade dress environment by recourse to a multiplicity of forms test not unlike that which the Federal Circuit had employed to revitalize the statutory design protection law.\textsuperscript{676} As applied to design patents, however, the multiplicity of forms test bore solely on the threshold issue of functionality, in conjunction with the statutory requirement of ornamentation, while evidence of copying—as an important secondary factor—bore solely on the issue of nonobviousness.\textsuperscript{677} In other words, evidence that alternate forms were available to produce comparable utilitarian yields and evidence of copying by second comers helped design patent owners to withstand two independent threshold challenges, either of which might suffice to invalidate the patent. Neither body of evidence necessarily determined the outcome of particular design patent cases at the infringement stage because highly functional designs still had to meet a stiffer standard of scrutiny, including the "point of novelty" test, to determine if the protectable matter had in fact been copied.\textsuperscript{678}

In the trade dress environment after 1985, in contrast, evidence of copying tended in and of itself to determine the outcome of the multiplicity of forms test, even though this test nominally controlled the level of the functionality barrier.\textsuperscript{679} In other words, fewer and fewer panels that per-

\textsuperscript{673} See supra note 670 and accompanying text.

\textsuperscript{674} Compare Kellogg Co. v. National Biscuit Co., 305 U.S. 111, 122 (1938) (stating that "[s]haring in the goodwill of an article unprotected by patent or trademark is the exercise of a right possessed by all") with International News Serv. v. Associated Press, 248 U.S. 215, 239-40 (stigmatizing wholesale appropriation of fruits of others' labors as "endeavoring to reap where . . . [one] has not sown"). See generally Brown, supra note 32, at 1341, 1386-95 ("Free Riders and Level Playing Fields"). For comparable tensions in foreign and international law, see Reichman, GATT Connection, supra note 50, at 784-96.

\textsuperscript{675} See supra text accompanying notes 191-233, 269-302.

\textsuperscript{676} See supra text accompanying notes 656-69.

\textsuperscript{677} See supra text accompanying notes 269-302.

\textsuperscript{678} See supra notes 303-18 and accompanying text; see also Winner Int'l Corp. v. Wolo Mfg. Corp., 905 F.2d 375 (Fed. Cir. 1990).

\textsuperscript{679} See, e.g., Clamp Mfg. Co. v. Enco Mfg. Co., 870 F.2d 512, 516-17 (9th Cir. 1989) (given copying, commercially feasible alternatives were deemed available despite expired utility patent on clamp design); Service Ideas, Inc. v. Traex Corp., 846 F.2d 1118, 1123 (7th Cir. 1988) (noting that while other forms were possible, "[a]ll of the evidence . . . indicates[s] an intent to duplicate the external design of the plaintiff's product"); Vaughan Mfg. Co. v. Brikam Int'l, Inc., 814 F.2d 346, 350 (7th Cir. 1987) (stressing the fact of copying while making no reference to the fact that a utility patent on the picnic table at issue had expired). But see, e.g., Woodsmith Publishing Co. v.
ceived a taint of copying would actually apply the nonfunctionality requirement to narrow the protection afforded product configurations under section 43(a), no matter how much courts professed to recognize the dangers of overprotecting utilitarian features in the abstract. Moreover, evidence of copying would increasingly determine the outcome of the trade dress cases at the infringement stage, too, as courts swayed by the protectionist ethos of \textit{LeSportsac} weakened the collateral prerequisites still to be met once plaintiffs had surmounted a functionality challenge.\footnote{See \textit{infra} notes 681-701 and accompanying text; \textit{see also supra} note 661 (citing cases).}

Evidence of commercial success or of large advertising expenditures, for example, readily established secondary meaning without more,\footnote{See, e.g., Clamp Mfg., 870 F.2d at 517; Hartford House, Ltd. v. Hallmark Cards, Inc., 846 F.2d 1268, 1270, 1272 (10th Cir. 1988); M. Kramer Mfg. Co. v. Andrews, 783 F.2d 421, 448-49 (4th Cir. 1986); \textit{see also Reader’s Digest} v. Conservative Digest, Inc., 821 F.2d 800, 804 (D.C. Cir. 1987) (“Courts uniformly have held that evidence of substantial sales and promotion of a product tends to show that the trade dress of the product has acquired secondary meaning.”). For a common source, \textit{see LeSportsac}, 754 F.2d at 78.} while evidence of a failed negotiation sometimes played a similar role.\footnote{See, e.g., Brunswick Corp. v. Spinit Reel Co., 832 F.2d 513, 516 (10th Cir. 1987) (failed negotiations; issue of secondary meaning or distinctiveness not raised on appeal); Ambriz, Inc. v. Kraft, Inc., 805 F.2d 974, 977, 985 (11th Cir. 1986); \textit{LeSportsac}, 754 F.2d at 78.} In such cases, courts seldom required complainants to establish a nexus between these factors and consumer identification of the design with a particular manufacturing source. This left open the possibility that consumers simply bought the product because they liked its design.\footnote{See, e.g., Metro Kane Imports, Ltd. v. Rowoco, Inc., 618 F. Supp. 273, 276 (S.D.N.Y. 1985), \textit{aff’d without opinion}, 800 F.2d 1128 (2d Cir. 1986), which stated as follows: “In \textit{LeSportsac}, the Second Circuit found that a company’s proof of ‘phenomenal sales success, substantial advertising expenditures, unsolicited media coverage, requests for third parties to license the use of its design and [defendant’s] deliberate attempt to imitate its trade dress’ was sufficient evidence to support a preliminary injunction. . . .” \textit{Metro Kane}, 618 F. Supp. at 276 (quoting \textit{LeSportsac}, 754 F.2d at 78). Some panels were more fastidious about such a nexus, however. \textit{See, e.g.,} Cicena Ltd. v. Columbia Telecommunications Group, 900 F.2d 1546, 1551 (Fed. Cir. 1990) (holding that sales success may show only that consumers wanted aesthetically pleasing telephone, not secondary meaning); First Brands Corp. v. Fred Meyer, Inc., 809 F.2d 1378, 1383 (9th Cir. 1987) (insisting on nexus between advertising expenditure and “image advertising” that fosters source identification of trade dress); Teutron, Inc. v. United States Int’l Trade Comm’n, 753 F.2d 1019, 1027 (Fed. Cir. 1985) (holding that advertising of machine tool did not focus attention on nonfunctional features of design as source identifiers).}

Moreover, evidence of copying frequently supported either a presumption that plaintiff’s design had acquired secondary meaning\footnote{See \textit{generally} Bryant, \textit{Trademark Infringement: The Irrelevance of Evidence of Copying to Secondary Meaning}, 83 Nw. U.L. Rev. 473 (1989). According to Bryant, evidence of copying may create either an irrebuttable presumption of secondary meaning or a rebuttable presumption, or it may serve only as one factor in the proof of infringement.} or a pre-
sumption that the defendant's design would confuse the relevant consumer group, or at times both presumptions in concert. These presumptions followed from the simplifying premise that defendants would not have copied the designs at issue unless they wanted to trade on the originators' good will, hence the copied designs must already have possessed secondary meaning. But this reasoning ignores other possible justifications for copying appearance designs, including a second comer's need to satisfy market demand or merely to engage in competition with a preexisting product. It also masks a tautology if "secondary meaning is proven by the defendant's intent to confuse the public, and . . . the defendant's intent to confuse the public is proven by the secondary meaning found in the original mark." Such a tautology then inclines courts to base the very existence

Id. at 487 (citing authorities). There is little consistency in applying these nuances, however, and panels smitten with the LeSportsac virus will tend to rely on evidence of copying regardless of the strength of the formal presumption. See infra note 685 (citing cases). Moreover, the "evidentiary weight that courts give this inference corresponds to the court's interpretation of the ethical importance of copying." Bryant, supra note 684, at 487. Hence, there are considerable inconsistencies even within single circuits that formally apply the same presumption. Compare, e.g., Blau Plumbing, Inc. v. S.O.S. Fix-It, Inc., 781 F.2d 604, 610-11 (7th Cir. 1986) (declining to allow copying to establish secondary meaning) with Vaughan Mfg. Co. v. Brikm Int'l, Inc., 814 F.2d 346, 349 (7th Cir. 1987) (stating that "proof of intentional copying was probative . . . of secondary meaning").

685. See, e.g., Clamp Mfg. Co. v. Enco Mfg. Co., 870 F.2d 512, 513-14, 517-18 (9th Cir. 1989) (copying tacitly reinforced inference of secondary meaning after the fact and expressly supported inference of likelihood of confusion); Fuddruckers, Inc. v. Doc's B.R. Others, Inc., 826 F.2d 837, 844-45 (9th Cir. 1987) (stating that evidence of deliberate copying was relevant to a determination of secondary meaning, but declining to shift burden to defendant because of copying); Reader's Digest Ass'n v. Conservative Digest, Inc., 821 F.2d 800, 804 (D.C. Cir. 1987) (holding that secondary meaning was shown by copying); M. Kramer Mfg. Co. v. Andrews, 783 F.2d 421, 448 n.241 (4th Cir. 1986) (stating that proof of deliberate copying of video game design established prima facie case of secondary meaning and supported presumption of likelihood of confusion). But see Brown, supra note 32, at 1377 n.163 (criticizing this double inference); Bryant, supra note 684, at 495-511 (criticizing all use of copying to show secondary meaning).

686. See, e.g., Reader's Digest, 821 F.2d at 804; M. Kramer Mfg., 783 F.2d at 448-49; Jolly Good Indus., Inc. v. Elegra Inc., 690 F. Supp. 227 (S.D.N.Y. 1988) (stressing that a defendant was not to "piggy back on [plaintiff's] goods, reputation, or market share" by means of intentional copying). But see, e.g., Schwinn Bicycle Co. v. Ross Bicycles, Inc., 870 F.2d 1176, 1183-85 & n.16 (7th Cir. 1989) (criticizing these presumptions); Sno-Wizard Mfg., Inc. v. Eisemann Prods. Co., 791 F.2d 423, 427-30 (5th Cir. 1986) (finding that defendant was not cashing in on plaintiff's goodwill because copying permitted him to use interchangeable machine parts and to make repairs).

687. See, e.g., Bryant, supra note 684, at 486, 498 ("The basis for this assumption is that no producer would be motivated to copy a mark that does not have secondary meaning. This proposition is counterintuitive.").

688. See, e.g., Cicena Ltd. v. Columbia Telecommunications Group, 900 F.2d 1546, 1553 (Fed. Cir. 1990) (holding that attempt to capitalize on consumer demand for see-through neon-lit telephone was licit absent strong evidence of secondary meaning). Moreover, the conduct of a defendant is irrelevant absent secondary meaning because copying another's product is a right unless abrogated by positive law. See generally Bryant, supra note 684, at 487-511; infra text accompanying notes 712-24.

of source-identifying characteristics on a moral judgment about copying.690

In some jurisdictions, courts were increasingly willing to dispense with proof of secondary meaning altogether and to protect product configurations deemed inherently distinctive.691 While this practice could be rationalized so long as the term trade dress retained its historical reference to packaging and container designs,692 use of the distinctiveness doctrine in the product configuration cases merely served to perfect a mystical judicial transformation of one thing into its opposite. At step one, courts converted product configurations into trade dress because “appearance . . . may function as packaging.”693 At step two, courts that accepted a distinctiveness test applied the lowest and most subjective standard of eligibility to

690. Id; see also P.I. KAUFMANN, supra note 50, at 12-13 (criticizing analogous moral evaluations in foreign law). In the Second Circuit, the tautology discussed in the text is further perfected by the notion that product designs may acquire instant secondary meaning, or “secondary meaning in the making,” which an alleged infringer’s act of copying had tortiously nipped in the bud. See, e.g., Metro Kane Imports, Ltd. v. Federated Dep’t Stores, Inc., 625 F. Supp. 313, 315-17 (S.D.N.Y. 1985), aff’d without opinion, 800 F.2d 1128 (2d Cir. 1986); Jolly Good Indus., Inc. v. Elegra Inc., 690 F. Supp. 227, 230 (S.D.N.Y. 1988); L.A. Gear, Inc. v. Thom McAn Shoe Co., 12 U.S.P.Q.2d (BNA) 1001 (S.D.N.Y. 1989) (recognizing doctrine of secondary meaning in the making, though not expressly approved by Second Circuit, because “defendants should not be entitled to benefit from their speedy efforts to appropriate the goodwill plaintiff was in the process of generating”). But see Cicena Ltd. v. Columbia Telecommunications Group, 900 F.2d 1546, 1548-49 (Fed. Cir. 1990) (finding this doctrine inconsistent with Lanham Act § 43(a)); see also Pegram, supra note 532, at 351 (stating that trademark protection of most new product configurations is unsatisfactory because secondary meaning takes time to acquire and can be thwarted “without protection at the outset”).

691. The Fourth, Fifth, Seventh, Tenth, and Federal Circuits all appear to have embraced the doctrine of “inherent distinctiveness” for these purposes, with varying degrees of enthusiasm. See, e.g., Blue Bell Bio-Medical v. Cin-Bad, Inc., 864 F.2d 1253, 1256-57 (5th Cir. 1989); Brunswick Corp. v. Spinit Reel Co., 832 F.2d 513, 517 n.2 (10th Cir. 1987); Ambrit, Inc. v. Kraft, Inc., 805 F.2d 974, 979 (11th Cir. 1986), cert. denied, 481 U.S. 1041 (1987); M. Kramer Mfg. Co. v. Andrews, 783 F.2d 421, 449 n.26 (4th Cir. 1986); Blau Plumbing, Inc. v. S.O.S. Fix-It, Inc., 781 F.2d 604, 608 (7th Cir. 1986) (stating that “[i]f any of these cases stands for the broader proposition that secondary meaning must be shown even if the trade dress is a distinctive, identifying mark, then we think they are wrong”). Jurisdictions reportedly requiring that a product configuration or package have acquired secondary meaning for purposes of § 43(a) include the First, Second, Third, Sixth, Eighth, and Ninth Circuits. See Brunswick, 832 F.2d 513 (citing authorities); see also Cicena, 900 F.2d at 1550 & n.5 (limiting distinctiveness to trademarks but requiring secondary meaning for trade dress under § 43(a)). Moreover, the status of this issue in the Ninth Circuit remains uncertain. See, e.g., Fuddruckers, Inc. v. Doc’s B.R. Others, Inc., 826 F.2d 837, 843 (9th Cir. 1987) (criticizing this doctrine but not resolving the issue).

692. See supra note 558 (citing cases); Brown, supra note 32, at 1378-80. Because the pool of packaging and container designs is infinitely large, at least in theory, a wide range of options allows a producer to appropriate a distinctive identity without unduly hindering competition. On this theory, secondary meaning had to be proved only if the dress were not sufficiently distinctive. See, e.g., Blue Bell, 864 F.2d 1253; Blau Plumbing, 781 F.2d 604; Chevron Chem. Co. v. Voluntary Purchasing, Inc., 659 F.2d 695 (5th Cir. Unit A Oct. 1981), cert. denied, 457 U.S. 1126 (1982). But see Cicena, 900 F.2d 1546.

693. Sno-Wizard Mfg., Inc. v. Eisemann Prods. Co., 791 F.2d 423, 426 n.3 (5th Cir. 1986) (citing Note, Trade Dress Infringement, supra note 528, at 79); see also supra notes 621-23 and accompanying text.
product configurations that were patently constrained by functional efficiency and market expectations. 694

Whether they settled for distinctiveness or required proof of secondary meaning, courts imbued with the spirit of LeSportsac seldom allowed imitators to exculpate themselves by a demonstration that labelling or other measures could avoid a likelihood of confusion 695 due to similarities of design. 696 Most panels, indeed, regarded intent to imitate as the critical factor because it showed that a defendant meant to profit from the plaintiff’s good will and reputation. 697 Once this critical factor came into play, courts

694. See Brown, supra note 32, at 1380. Professor Brown wrote:

To say that the overall design of a useful article is “inherently distinctive” of a particular source just by examining it . . . substitutes an impression that the design is outstanding, or eccentric, or clever . . . for the proofs of association with a source, gained in the marketplace, that add up to a showing of secondary meaning. Furthermore, such a short-cut subordinates the functionality inquiry . . . indispensable in appraising a design.

Id. The fallacy was thus to apply the distinctiveness standard of eligibility reserved for true trade dress to three-dimensional industrial designs, as if the pool of configurations potentially available for any given product were as unlimited as the pool of packaging and container designs potentially available for that same product.

695. Formally, a plaintiff had not made out a case for trade dress infringement until he had shown “some ‘likelihood of confusion’ on the part of consumers as to the source of the product” once he established that the trade dress was either inherently distinctive (in some circuits only) or that it had acquired secondary meaning to consumers. See, e.g., Schwinn Bicycle Co. v. Ross Bicycles, Inc., 870 F.2d 1176, 1183 n.14 (7th Cir. 1989). The likelihood of confusion test examines the behavior of “ordinary purchasers purchasing in the ordinary manner.” Id. at 1187 n.19.

696. See, e.g., Fuddruckers, Inc. v. Doc’s B.R. Others, Inc., 826 F.2d 837, 846 & n.13 (9th Cir. 1987); Ambrt, Inc. v. Kraft, Inc., 805 F.2d 974, 984 (11th Cir. 1986) (use of distinguishing word marks did not preclude a finding of actionable design similarity), cert. denied, 481 U.S. 1041 (1987); M. Kramer Mfg. Co. v. Andrews, 783 F.2d 421, 448 n.24 (4th Cir. 1986); see also Hartford House, Ltd. v. Hallmark Cards, Inc., 846 F.2d 1268 (10th Cir. 1988) (holding that strong brand of defendant did not suffice to offset confusingly similar line of nonoccasion greeting cards). On one view, indeed, the confusion standard applicable to trade dress cases ought to be more encompassing than that used for symbols protected as true trademarks, even though trade dress now included three-dimensional product configurations. This followed because § 43(a) dealt with unfair competition, which was a body of law that reached “the total image of plaintiff’s product, package, and advertising” and not “merely one facet of plaintiff’s total selling image as in trademark law.” 1 J.T. McCarthy, supra note 525, § 8:1, at 282-83.

697. See, e.g., Hartford House, 846 F.2d 1268; Service Ideas, Inc. v. Traex Corp., 846 F.2d 1118 (7th Cir. 1988); Brunswick Corp. v. Spinit Reel Co., 832 F.2d 513 (10th Cir. 1987); Fuddruckers, 826 F.2d 837; Vaughan Mfg. Co. v. Brikam Int’l, Inc., 814 F.2d 346 (7th Cir. 1987); M. Kramer Mfg., 783 F.2d 421. However, a few courts, unchallenged by this philosophy, did allow for labelling and looked into the nature of, and reasons for, specific acts of copying. See Schwinn Bicycle, 870 F.2d at 1184-88 & n.16 (refusing to presume likelihood of confusion without application of “digits of confusion” test; noting that “labeling may be an important factual factor . . . in a particular case and may not, as a matter of law, be deemphasized merely because the element of secondary meaning is established; and fearing the creation of a “product monopoly rather than the protection of trade dress,” especially if the product had been the first of its type on the market). In some courts, labelling carried more weight if the design was viewed as a “weak mark” or if the underlying goods were purchased by discriminating buyers.
adjudicating actions for infringement of appearance trade dress would routinely issue temporary and permanent injunctions, much as copyright courts would do if artistic property rights had been violated. The federal appellate courts tended, in short, to eliminate all further possibility of confusing similarity by prohibiting imitation as such, rather than imposing reasonable measures to avoid the actual or probable confusion that was nominally the crux of the matter.

In sum, evidence of commercial success, extensive advertising, copying, and failed negotiations often combined to truncate all further judicial deliberations once courts began routinely to validate product configurations as trade dress on grounds of nonfunctionality. Yet, these were the very secondary considerations most likely to cement a finding of nonobviousness for purposes of validating issued design patents. While these factors in that legal subculture could yield a fourteen-year monopoly on very strict conditions, the same factors operating in the trade dress milieu produced an equally powerful monopoly, without any requirements of novelty or nonobviousness, that could last as long as the proprietor cared to defend it.

c. Misappropriation and Its Countervailing Tendencies

The patterns repeated in these cases demonstrate that most federal courts applying section 43(a) to unpatented, noncopyrightable industrial designs in the period 1985 to 1990 aimed to repress misappropriation as such, in the spirit of International News Service v. Associated Press, and

See, e.g., Blue Bell Bio-Medical v. Cine-Bad, Inc., 864 F.2d 1253 (5th Cir. 1989); First Brands Corp. v. Fred Meyer, Inc., 809 F.2d 1378, 1384-85 & n.6 (9th Cir. 1987); Snow-Wizard, 791 F.2d at 428-29.

698. See, e.g., Hartford House, 846 F.2d at 1270, 1274 (enjoining defendant from copying, imitating or marketing greeting cards that reproduced plaintiff's "specific artistic expression, in combination with other features to produce an overall . . . look," and stating that such protection did not conflict with the policy of copyright law); Brunswick, 832 F.2d at 524-25 (affirming injunction against imitating present or similar configuration of fishing reel design despite defendant's alterations to avoid confusion and despite evidence that design enhanced function); Service Ideas, 846 F.2d at 1125; and Vaughan Mfg., 814 F.2d at 351 (holding designs of beverage server and of folding picnic table protected by trade-dress injunctions despite expired patents); see also supra note 697. However, some courts worried that overly broad injunctions could prevent a defendant from marketing functional as well as nonfunctional features of a given configuration or design. See, e.g., Woodsmith Publishing Co. v. Meredith Corp., 904 F.2d 1244 (8th Cir. 1990) (magazine format not actionably similar despite evidence of actual confusion); Inverness Corp. v. Whitehall Laboratories, 819 F.2d 48, 51 (2d Cir. 1987); American Greetings Corp. v. Dan-Dee Imports, Inc., 807 F.2d 1136, 1144 (3d Cir. 1986); Ambril, 805 F.2d at 990-92 (modifying overly broad injunction that restricted use of royal blue color on ice cream wrapper).

699. See supra note 683 (quoting LeSportsac, 754 F.2d at 78).

700. See supra notes 151-70, 177-90, 259-68 and accompanying text.

701. See supra notes 624, 654 (quoting Stormy Clime Ltd. v. ProGroup, Inc., 809 F.2d 971, 976-78 (2d Cir. 1987); infra text accompanying notes 729-33.

702. 248 U.S. 215 (1918); see supra notes 548-49 and accompanying text.

Misappropriation is an ill-defined tort that provides relief when the intellectual
not merely to prevent confusion in the marketplace due to similar, source-
identifying features of trade dress. The net result, as one panel of the Sev-
enth Circuit recently admitted with chagrin, is that “most of the plaintiff’s
required proof for both trademark infringement and for preliminary injunc-
tion can be accomplished by simply filing suit and proving intentional copy-
ing.”703 As the decade drew to a close, moreover, the protectionist surge
that followed LeSportsac in 1985 showed few outward signs of abating.704
Indeed, Professor Brown observed in 1987 that “[i]f the flow of reported
decisions is any guide to the pace of activity in the real world, unfair compe-
tition law appears to be overtaking both copyright and design patent as a
source of protection for designs.”705

Countervailing tendencies were nonetheless at work throughout the
period under review, both in the case law and the literature. Some courts
recognized, for example, that application of a weak functionality standard to
product configurations in keeping with the prevailing trend could end by
protecting the actual benefits that consumers expected to obtain from cer-
tain products as distinct from their source-identifying features.706 Others
feared it had become too easy to remove ideas, themes, and core concepts

703. Schwinn Bicycle Co. v. Ross Bicycles, Inc., 870 F.2d 1176, 1184 n.16 (7th Cir. 1989).
This followed because evidence of a defendant’s intent to imitate could give rise to a
nearly conclusive presumption of source confusion, often preceded by an equally
strong presumption of secondary meaning that was also premised on the fact of copy-
ing. See also supra notes 681-90 and accompanying text; Brown, supra note 32, at
1377 n.163 (“The coup de grace is to combine these inferences. . . .”). Preliminary
injunctions could then follow almost automatically because lack of an adequate remedy
at law and irreparable harm were themselves standard inferences to be drawn from evi-
dence that a complainant would probably succeed in proving a likelihood of confusing
similarity at trial. See Schwinn Bicycle, 870 F.2d at 1184 n.16 (noting and criticizing
this phenomenon); supra notes 695-98 and accompanying text. Even the non-func-
tionality requirement was at times indirectly satisfied by a presumption drawn from
evidence of copying, in the sense that a competitor’s failure to seek alternate forms
actually determined how some courts applied the multiplicity of forms test and inhib-
ited them from evaluating the larger public interest. See supra notes 697-98 and
accompanying text.

704. See, e.g., J. Gilson, supra note 538, § 2.13[1] (noting “a torrent of cases granting relief
on this ground” and stating that § 43(a) as applied to trade dress “has eclipsed state law
on the subject”).

705. Brown, supra note 32, at 1357. For the view that this represents a positive rather than a
negative development, see generally Dratler, supra note 564; Franzosi, Unfair Compe-
tition, supra note 522.

706. See, e.g., Schwinn Bicycle, 870 F.2d at 1184 n.16 (fearing creation of product monop-
oly); Rachel v. Banana Republic, Inc., 831 F.2d 1503 (9th Cir. 1987); American Greet-
from the public domain. Still others rejected any indeterminate limitations on a competitor's fundamental right to imitate superior products and warned against undermining the patent law by indirectly protecting utilitarian advantages that did not satisfy the novelty and nonobviousness standards.

In 1987, moreover, Landes and Posner published an economic analysis of general trademark law that called into question the excesses of the product configuration cases. Their findings confirmed and refined insights concerning the limits of trademark protection for appearance designs that Judge Posner had advanced in *W.T. Rogers Co. v. Keene*, a 1985 decision of the Seventh Circuit that *LeSportsac* had temporarily eclipsed. An article by Professor Brown, also published in 1987, reminded the relevant legal community that decisions sounding in misappropriation rested on shaky legal and economic foundations in United States law.

These countervailing pressures gave rise, in 1989, to two judicial pronouncements of capital importance for future developments in this field. In *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, the United States Supreme Court invalidated state plugmold statutes on the grounds that they unduly interfered with the federal patent law. In so doing, the Supreme Court again rejected the misappropriation rationale of *International News Service* and appeared to invest a competitor's right to reverse engineer unpatented products.

707. See, e.g., Woodsmith Publishing Co. v. Meredith Co., 904 F.2d 1244 (8th Cir. 1990) (finding method and style of doing business not protectable); Prufrock Ltd., Inc. v. Lasater, 781 F.2d 129, 134 (8th Cir. 1986) (holding chosen theme or concept not protectable trade dress); see also First Brands Corp. v. Fred Meyer, Inc., 809 F.2d 1378 (9th Cir. 1987) (finding shape was industry standard); American Greetings, 807 F.2d at 1145 (holding standard configurations and marketing methods not protectable).

708. See, e.g., Cicena Ltd. v. Columbia Telecommunications Group, 900 F.2d 1546, 1551 & n.2 (Fed. Cir. 1990) (stating that § 43(a), at least prior to its amendment, does not protect skilled efforts as such); Textron, Inc. v. United States Int'l Trade Comm'n, 753 F.2d 1019, 1024-25 (Fed. Cir. 1985); infra notes 717-21 and accompanying text.

709. See, e.g., Stormy Clime Ltd. v. ProGroup, Inc., 809 F.2d 971, 977-78, (2d Cir. 1987) (noting that trade dress protection of product design can bar entry to markets not foreclosed by patents, and stressing monopoly power of unregistered trademark); Standard Terry Mills, Inc. v. Shen Mfg. Co., 803 F.2d 778, 781, 796 (3d Cir. 1986) (stating that judicial disapprobation of copying must give way to public policy favoring competition in regard to unpatentable products); Sno-Wizard Mfg., Inc. v. Eisemann Prods. Co., 791 F.2d 423, 426 n.3 (5th Cir. 1986); supra note 670 and accompanying text.


711. 778 F.2d 334 (7th Cir. 1985).

712. See generally Brown, supra note 32; see also Meyer, supra note 528, at 88-92.

ucts with constitutional underpinnings. Flatly declaring that the legitimate concern of unfair competition law lay in “protecting consumers from confusion as to source . . . not [in] the protection of producers as an incentive to product innovation,” the Court cited Professor Brown’s 1987 article and reaffirmed the antiprotectionist mandate of Sears-Compco with particular reference to industrial designs.

A few months later, in Schwinn Bicycle Co. v. Ross Bicycles, Inc., the Court of Appeals for the Seventh Circuit applied economic analysis to the design of an exercise bicycle and backed away from the protectionist line identified with LeSportsac. In a ground-breaking opinion, the panel found that the “superior” or “optimal” design test derived from Morton-Norwich and LeSportsac had induced courts to exclude only the best possible designs and to ignore real difficulties competitors might face in trying to engineer around successful product configurations at a reasonable cost. The Schwinn Bicycle panel, like its predecessor in W.T. Rogers, advocated the retention of a modified aesthetic functionality test capable of excluding designs that became market standards or that were so much valued for their own sake that effective competition could not occur without product simulation.

Although one cannot foresee the future impact of these decisions with any degree of certainty, they add to a growing reaffirmation of the fundamental principle that allows competitors to copy all products not qualifying as “inventions” or “literary and artistic works.” Whether the raw com-

714. Id. at 159-64; see Wiley, supra note 537, at 301-02.
716. Id. at 159-68.
717. 870 F.2d 1176 (7th Cir. 1989).
718. Id. (vacating preliminary injunction protecting design of exercise bicycle as trade dress because fact of copying did not support presumption of likelihood of confusion and modified aesthetic functionality test should have been applied); see also W.T. Rogers Co. v. Keene, 778 F.2d 334 (7th Cir. 1985) (followed in Schwinn Bicycle, 870 F.2d 1176); supra notes 710-11 and accompanying text.
719. See Schwinn Bicycle, 870 F.2d at 1189-90; Bloomfield Indus. v. Stewart Sandwiches, Inc., 716 F. Supp. 380 (N.D. Ind. 1989) (applying Schwinn Bicycle to exclude look-alike design of coffeemaker); see also Sno-Wizard Mfg., Co. v. Eisemann Prods., 791 F.2d 423 (5th Cir. 1986) (stating that evidence suggested that design of machine was the most effective, practical, and cost-effective, so that other designs would have economic or functional draw-backs).
720. 778 F.2d 334 (7th Cir. 1985).
721. See Schwinn Bicycle, 870 F.2d at 1191; W.T. Rogers, 778 F.2d at 346-47. For the most recent case, see Wallace Int’l Silversmiths, Inc. v. Godinger Silver Art Co., 916 F.2d 76 (2d Cir. 1990); cf. Estabilimento Miliardi-Zanova S.r.L. v. Cassina, at 453 (Court of App., Florence, Italy, Feb. 4, 1989) (rejecting claim for unfair competition, holding that defendant’s minor variations on the LeCorbusier chair designs were either sufficient to identify it as the source of manufacture or were the only variations it could have made without compromising the value of the unpatented models), discussed in supra note 380.
722. See Bonito Boats, 489 U.S. at 163-68 (reaffirming the right of competitors to reproduce unpatented, noncopyrightable designs, and declaring that Congress had decided to
petitive mandate institutionalized in this historical dichotomy infallibly promotes the public welfare under modern economic conditions remains open to doubt.\footnote{723} Even so, \textit{Bonito Boats} and \textit{Schwinn Bicycle} may well prefigure yet another swing of the pendulum away from the misappropriation rationale of \textit{International News Service} and \textit{LeSportsac} back to the free-market ethos of \textit{Kellogg Co. v. National Biscuit Co.} and \textit{Sears-Compco}.\footnote{724} Scholars and practitioners seeking to ascertain the status of design protection law in the United States will therefore need to test the trade-dress waters at frequent intervals in order to determine if the floodgates of protection thrown open in the 1980s are not abruptly to close before the 1990s get very far under way.

3. Critical Evaluation of Current Law

The fiction that product configurations are just another form of trade dress leads to the odd conclusion that every product comes equipped with at least two trade dresses for purposes of section 43(a). One comprises the exterior shell or three-dimensional form that houses whatever else the product consists of, known today as "appearance trade dress." The other comprises the package or container placed around the product when sold or transported from one place to another, which is what trade dress signified in the past.\footnote{725}

Some courts and commentators who favor this result fear that a tenuous distinction between "trade dress" and "trademarks" could allow different legal rights to flow from mere differences in labels.\footnote{726} While this concern is valid in a narrow, technical sense, it ignores that product configurations traditionally received only marginal protection in unfair competition law because positive intellectual property law ordained that unpatented, non-


\footnote{724} See \textit{supra} notes 527-29, 549 and accompanying text.

\footnote{725} See \textit{supra} notes 556-63, 635-36 and accompanying text.

\footnote{726} See, e.g., Blau Plumbing, Inc. v. S.O.S. Fix-It, Inc., 781 F.2d 604, 608 (7th Cir. 1986).
If substantive rights ought not to depend on mere labels, then calling product configurations "appearance trade dress" will not make them any the less product configurations. Nor should it automatically entitle them to the generous modalities of protection afforded packaging and container designs in recent years. The question is not whether trade dress should be assimilated to trademarks. It is how to protect product configurations—that is to say, three-dimensional designs of useful articles—within a federal intellectual property system that has been artificially carved up into semi-autonomous subcultures each at war with the others.

In this connection, one hears too much loose talk about protecting the good will associated with product configurations under section 43(a) of the Lanham Act. Although a manufacturer's advantageous relations with the public are to some extent symbolized by his mark, a property right in the mark protects good will only insofar as it excludes others from drawing on the information it provides, but not from using the qualities or features of the underlying product. So long as both Congress and the Supreme Court continue to regard the broad misappropriation doctrine of International News Service as inconsistent with free-market principles, it


728. The turning point was apparently Chevron Chem. Co. v. Voluntary Purchasing Groups, Inc., 659 F.2d 695 (5th Cir. Unit A Oct. 1981), which Professor McCarthy believes "brought trade dress cases into the mainstream of trademark law." I J.T. McCarthy, supra note 525, at 287.

729. Broadly conceived, good will results from a manufacturer's investment of time, money and skill, and it encompasses most of the factors that fan consumer demand for given products or services. See, e.g., 3 S. Ladas, supra note 1, at 1677-78, 1705-06 (stressing that a competitor's improper conduct may disrupt advantageous business relations built on goodwill without direct harm to the consuming public); Dratler, supra note 564, at 927 & n.212 (designating protection of goodwill as the least important purpose of trademark law).

730. See, e.g., Inwood Laboratories, Inc. v. Ives Laboratories, Inc., 456 U.S. 844, 854 n.14 (1982) (stating that "by applying a trademark to goods produced by one other than the trademark's owner, the infringer deprives the owner of the good will which he has spent energy, time, and money to obtain"); Schwinn Bicycle Co. v. Ross Bicycles, Inc., 678 F. Supp. 1336, 1344 (N.D. Ill. 1988) (declaring that, even without a showing of secondary meaning, the competitor should not be allowed to "cash in" on the plaintiff's good will in the design of an exercise bicycle), vacated, 870 F.2d 1176 (7th Cir. 1989); see also Jolly Good Indus., Inc. v. Elegra Inc., 690 F. Supp. 227 (S.D.N.Y. 1988) (defendant not to "piggyback on [plaintiff's] goods, reputation, or market share").

731. See, e.g., 2 S. Ladas, supra note 1, at 967-68; Landes & Posner, supra note 710, at 268-75.

732. See supra notes 527-28, 546-49 and accompanying text; Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 146 (1989) (reconfirming that patent system "embodied a careful balance between the need to promote innovation and the recognition that imitation and refinement through imitation are . . . the very lifeblood of a competitive economy"); see also P.J. Kauffman, supra note 50, at 4-5 (criticizing a "quasi-patent" analysis that allows the goodwill in an imitated product to be protected as such). But see, e.g., R. Callman, The Law of Unfair Competition 33 (L. Altman 4th ed. 1981) ("If the copyist rival is permitted to ride 'piggy-back' into the market on the shoulders
is not the province of trademark and unfair competition laws to protect investment as such, nor indirectly to protect design concepts, ideas, methods, principles, and marketing strategies. 733

 Trademarks serve to distinguish the goods or services of single firms from those of other firms. 734 By protecting the signs and symbols used to make these distinctions, trademark law reduces the search costs to consumers, 735 stimulates manufacturers to "maintain a consistent quality over time and across consumers," 736 and discourages conduct tending to deceive or confuse consumers. 737 That there are sound economic justifications for securing property rights in trademarks 738 does not mean that courts should use trademark law to stimulate innovation or to provide incentives for product development that derogate from the norms of competition. 739 The opposite is true, as Stephen Ladas pointed out, 740 because trademark law lacks the limitations and safeguards that positive intellectual property law establishes in order to balance the long-term public interest against short-term restraints on trade. 741 To the extent that trademark and unfair competition laws attempt to remedy the perceived inadequacies of other legal disci-
they set up a competing forum capable of furnishing longer and
tougher forms of protection on softer conditions. At the limit, unfair
competition law provides a ritual formula for suspending the rules of compe­
tition in favor of perpetual monopolies that are conferred on a hit-or-miss
basis for reasons that vary with the outlook of single judges.

The recent erosion of the functionality standard applied to product
configurations under section 43(a) illustrates this disruptive capacity.
Time and again case law and the literature postulate that arbitrary or fanci­
ful trademarks are always available and that competitors never lack substi­tute symbols. In reality, product configurations are most efficient when
they combine functional and aesthetic attributes into an indissoluble whole
that self-advertises the manufacturer and the product. Such forms are
hardly limitless, however. When the utilitarian nonfunctionality standard
is unduly weakened in order to defend source-identifying aspects of these
configurations, second comers may have to engineer around either the
design as a whole or some of its constituent features in order to obtain com­
parable technical yields or even to gain entry into the market.

To avoid these anomalies, trademark and unfair competition laws must
require highly utilitarian product designs to undergo stringent tests of eligi­
bility and infringement. If functional design features cannot realistically
be separated from aesthetic or distinctive features without loss of technical
efficiency or output, no amount of secondary meaning should oblige a sec-

742. See, e.g., Reichman, Programs as Know-How, supra note 23, at 661-67.
743. See, e.g., Meyer, supra note 528, at 111-12; Pegram, supra note 532, at 349-51. But
see Dratler, supra note 564, at 975 (contending that “trademark law can accommodate
protection of industrial design with the congressional mandate for free and robust com­
petition”).
744. See, e.g., Pegram, supra note 532, at 348-49; supra note 624.
745. See, e.g., van Nieuwenhoven Helbach, supra note 522, at 7 (referring to Netherlands
law).
746. See supra notes 653-69 and accompanying text.
747. See, e.g., Landes & Posner, supra note 710, at 274; supra notes 608-12 and accompanying
 text. But see, e.g., Carter, The Trouble With Trademark, 99 YALE L.J. 759, 760,
787-88 (1990) (criticizing barriers to entry sheltered by this doubtful promise).
748. See, e.g., van der Put & Komarnicki, Cooperation Between the Industrial Designer and
 the Lawyer Within an Enterprise, in DESIGN PROTECTION, supra note 8, at 181-203;
Reichman, Designs After 1976, supra note 17, at 280-82. See generally J. Heskett,
 (stating that a “feature is functional if it is one that is costly to design around or do
without, rather than one that is costly to have,” and suggesting that a second comer
might have to duplicate aspects of the appearance of an exercise bicycle in order to
duplicate its utilitarian features); W.T. Rogers Co. v. Keene, 778 F.2d 334, 339-40 (7th
Cir. 1985); Landes & Posner, supra note 710, at 297; see also supra text accompanying
notes 196-210, 269-302 (discussing nonprotection of utility models in United States
intellectual property law).
750. Utilitarian designs, for example, should never qualify as unregistered marks without
evidence of strong secondary meaning, and a defendant’s intent to copy is irrelevant to
this determination. See, e.g., Bryant, supra note 684, at 510-11; Duft, supra note 550,
at 184-93, 201-03.
To reduce this risk, courts should demand correspondingly stronger evidence of secondary meaning and probable confusion when evaluating very functional designs at the infringement stage. They should also insist that the elements said to foster confusion actually pertain to protectable components of the design and not to components that bear on functional yields or standardized results. In principle, courts should prefer remedies that are the least disruptive of normal market forces, especially that of corrective labelling, rather than injunctive relief.

Even when the appearance design of a useful article meets stiff requirements of secondary meaning and of utilitarian nonfunctionality, and there is a real likelihood of confusion, the design should not qualify as an unregistered mark if it becomes an intrinsic part of the product in the minds of the purchasing public; or if it attains the status of a market standard for goods of a particular class; or if its popularity as a product design significantly outweighs its source-identifying capability within the relevant consumer group. Over time, commercial success can render any source-identifying appearance design quasi-generic because of its popular association with a product rather than a producer. Such features become "aes-

---


753. See, e.g., Schwinn Bicycle, 870 F.2d 1176.

754. See supra note 750. Even when appearance designs are not highly functional, courts must nonetheless ensure that true secondary meaning has been acquired over and above the popularity of the product, and they should ascertain that a nexus exists between advertising or commercial success and source identification. See, e.g., Duft, supra note 550, at 184-93, 201-03 (arguing for a stiff standard of secondary meaning in regard to commercially successful ornamental designs).


756. See, e.g., Wallace Int'l Silversmiths, Inc. v. Godinger Silver Art Co., 916 F.2d 76 (2d Cir. 1990) (finding "no difference between a claim . . . [to] basic elements of decorative style on silverware and claims to generic names"); W.T. Rogers, 778 F.2d at 347-48 (comparing loss of trademark because consumers like it for its own sake rather than for its informational content to loss of a brand name that becomes generic). Judge Posner observed that the manufacturer remains free to brand his product with identity symbols even if consumers can no longer look to the configuration for source identification. He added that what the manufacturer "may fear of course is not the loss of an identifying mark but the loss of a competitive advantage stemming from the exclusive possession of a popular design"; yet, for that he "must seek the aid of the design-patent law, with its stringent requirements and its 14-year limitation, and not the aid of the trademark laws." Id. at 348.
Theoretically functional" if second comers cannot compete effectively without designing around them, which costs money, or if access to the market becomes difficult unless copying is allowed, just as occurs in cases of utilitarian functionality.757

The aesthetic functionality doctrine inherited from the first Restatement of Torts, which excluded most commercially successful designs under the "important ingredient" test, was undoubtedly a crude method of subordinating trademark and unfair competition laws to the sway of copyright and design patent laws.758 To vitiate the aesthetic functionality doctrine without providing other means of restraining trademark law from disrupting its sister legal subcultures is an even cruder response. One can agree that a design need not be ugly to qualify as an unregistered mark759 without forgetting that trademark law protects industrial designs only insofar as they provide information about the source of manufacture760 and do not become "so important to the value of the product to consumers that continued . . . protection would deprive them of competitive alternatives."761 A modified aesthetic functionality doctrine thus provides a useful tool for restraining the excesses of the trade dress approach,762 and it merits careful development in the future.763

Neither a modified aesthetic functionality doctrine nor stringent application of other substantive prerequisites, however, will suffice to eradicate

757. See, e.g., id. at 347; Landes & Posner, supra note 710, at 297-99 ("The concept of 'aesthetic' functionality gives recognition, highly appropriate from an economic standpoint, to the fact that utility in an economic sense includes anything that makes a good more valuable to consumers. . . . A problem arises only if the aesthetic feature becomes an attribute of the product . . . in the minds of consumers."); see also Restatement (Third) of Unfair Competition § 17 comment c (Tent. Draft No. 2, 1990) (stating that aesthetic functionality generally applies "only when objective evidence indicates a lack of adequate alternative designs").

758. See supra notes 550-51, 608-12 and accompanying text.

759. See, e.g., W.T. Rogers, 778 F.2d at 347 ("[A] producer does not lose a design trademark just because the public finds it pleasing. . . ."); LeSportsac, Inc. v. K Mart Corp., 754 F.2d 71, 76-78 (2d Cir. 1985).

760. See supra notes 733-41 and accompanying text; Blau Plumbing, Inc. v. S.O.S. Fix-It, Inc., 781 F.2d 604, 609 (7th Cir. 1986).

761. W.T. Rogers, 778 F.2d at 347; see supra notes 755, 757; see also Meyer, supra note 528, at 101 (discussing cases in which "it is impossible to separate the goods from the alleged trademark" and "it is the 'trademark' that consumers want to purchase"). Meyer concludes that an "exclusive right to the mark then confers a monopoly . . . [that] precludes others from offering the same product. In that sense plaintiff's right in the valuable symbol is equivalent to a copyright." Id.

762. See, e.g., Schwinn Bicycle, 870 F.2d at 1190-91 (remanding to determine whether design of exercise bicycle had become "so attractive that trade dress protection deprives consumers of competitive alternatives"); W.T. Rogers, 778 F.2d at 340, 342-43 (remanding to determine whether the hexagonal end panel was "common to the entire product as evolved," i.e., to the molded plastic office stacking tray, or whether the design was otherwise functional); see also Landes & Posner, supra note 710, at 299.

763. It is not clear, for example, why such a doctrine should be viewed as imposing a "heavy burden" on a defendant, as the Schwinn Bicycle panel seemed to believe. See Schwinn Bicycle, 870 F.2d at 1190.
the raw protectionist bias that threatens to transform section 43(a) of the Lanham Act into a law prohibiting the misappropriation of three-dimensional industrial designs. The Supreme Court’s Bonito Boats decision thus provides a timely reminder that it cannot be unfair, in principle, to make free use of that which Congress has wisely or unwisely chosen to leave unprotected. Some observers expect this latter-day reaffirmation of Sears-Compco to induce the federal judiciary to moderate protectionist sentiments rampant in the 1980s.

Yet, no evocation of liberal economic principles will make the design problem go away or provide a solution worthy of the name. The risk, indeed, is that unless Bonito Boats were followed by suitable legislative action, it could merely replace a period of mounting overprotection with a period of chronic underprotection in the name of nineteenth century economic principles that yield increasingly unsatisfactory results when applied to twentieth century technologies. The nature of these oscillations between states of over- and underprotection is more fully explored in the final part of this Article. For present purposes, one should recall that the United States intellectual property authorities urged Congress to provide the design industries with a sui generis legal regime built on modified copyright principles, a scheme that was very nearly enacted in 1976. The logical and most expedient solution is to pass a similar law now, at a time when the Supreme Court’s Bonito Boats decision may have jeopardized recently acquired rights. Unfortunately, this solution has been compromised by special interests seeking to transform the carefully worked out provisions of the preexisting ornamental design bill into a law that would protect functional designs of every kind without requiring any appreciable creative.

764. See supra notes 702-05 and accompanying text.
765. Bonito Boats, 489 U.S. at 156 (“At the heart of Sears and Compco is the conclusion that the efficient operation of the federal patent system depends upon substantially free trade in publicly known, unpatented design and utilitarian conceptions.”).
766. See, e.g., Pegram, supra note 532, at 345-48; see also Wiley, supra note 537, at 289-94.
768. See infra text accompanying notes 811-972.
770. See H.R. 3499, 101st Cong., 1st Sess. (1989) (Moorhead Bill), reprinted in 38 Pat. Trademark & Copyright J. (DNA) 684-89 (Oct. 26, 1989) (proposing in § 1(a) to protect “an original design of a useful article which makes the article attractive or distinct in appearance to the purchasing or using public” and excluding in § 2 designs that are not original, that are staple or commonplace or that are “dictated solely by a utilitarian function, and apparel designs”) (emphasis supplied); H.R. 3017, 101st Cong., 1st Sess. (1989) (Gephart Bill), reprinted in 38 Pat. Trademark & Copyright J. (DNA) 348-54 (Aug. 3, 1989) (essentially the same as to coverage except that typeface designs are included while some provision is made to limit the eligibility of automotive spare parts in § 1002(4)); H.R. 902, 101st Cong., 1st Sess. (1989), reprinted in Pat. Trademark & Copyright J. (BNA) 359-68 (Feb. 16, 1989) (essentially the same but proposing to
contribution.\textsuperscript{772}

As will be seen below, the legal status of functional designs cannot rationally be severed from the drive to protect applied scientific know-how in general,\textsuperscript{773} and no law purporting to regulate the one without addressing the other deserves serious consideration.\textsuperscript{774} In the long run, a satisfactory solution to the puzzle of applied scientific know-how should determine the nature of the protection afforded both functional and ornamental designs within the framework of far-reaching adjustments to the world’s intellectual property system.\textsuperscript{775} In the short run, however, tinkering with established modalities of intellectual property law for the purpose of protecting functional designs that are neither aesthetically nor technically innovative constitutes an unprecedented assault on free-market principles,\textsuperscript{776} a solution exclude typeface designs). The precise coverage obtained by allowing protection for “two-dimensional or three-dimensional features of shape and surface” that make a useful article “attractive or distinct in appearance” is open to question, as is the thrust of the common exclusion for functionality, which kicks in only when a candidate design is “dictated solely by a utilitarian function.” See, e.g., H.R. 3017, 101st Cong., 1st Sess. §§ 1001(a), 1002-03 (1989). It is clear, nevertheless, that by changing the nature of the subject matter of protection from “ornamental designs” to “industrial designs,” leading supporters of these bills want them to protect nonpatentable functional designs, including automobile and tractor replacement parts. See, e.g., House Panel Looks at Impact of Proposed Design Protection on Auto Parts Market, 40 Pat. Trademark & Copyright J. (BNA) 207 (June 28, 1990) (summarizing testimony before House Subcommittee on Courts, Intellectual Property and the Administration of Justice, June 20, 1990); infra note 776; see also Brown, supra note 32, at 1399-1403 (analyzing and criticizing an earlier version of these bills); Hearing on H.R. 1179, Protection of Industrial Designs of Useful Articles Before the Subcomm. on Courts, Civil Liberties & the Admin. of Justice of the House Comm. of the Judiciary, 100th Cong., 2d Sess. 153-64 (1988) [hereinafter Design Protection Hearings 1988] (statement of Professor Ralph S. Brown, Yale University); id. at 57-65 (statement of Ralph Oman, Register of Copyrights).

\textsuperscript{772} See, e.g., H.R. 3017, 101st Cong., 1st Sess. §§ 1001(a), 1002-03 (1989) (requiring originality in the sense of independent creation, excluding staple or commonplace designs and designs dictated solely by function, and allowing substantial revisions of commonplace or staple designs). The other bills, H.R. 3499 and H.R. 902 are the same in this respect. Contrast the zero creativity standard of these bills with the relatively stiff standards of inventive height traditionally required of functional designs under foreign utility model laws. See supra note 198 and accompanying text; see also infra text accompanying notes 899-972. Another defect of the proposed design bills is that their line of demarcation with trademarks is also murky and can be read to preserve the broad protection currently available under § 43(a). See, e.g., Brown, supra note 32, at 1399-1400.

\textsuperscript{773} See infra text accompanying notes 866-900. See generally Reichman, Programs as \textquoteleft Know-How, supra note 23, at 661-67, 714-17.

\textsuperscript{774} The recently enacted unregistered design law in the United Kingdom, supra note 202, only confirms the proposition sustained in the text. According to Fellner, this law was really an effort to cut back on the exorbitant copyright protection of functional designs that English courts developed in recent years. See Fellner, New U.K. Law, supra note 46; see also infra notes 846, 947-63 and accompanying text.

\textsuperscript{775} See infra text accompanying notes 866-972.

\textsuperscript{776} See, e.g., Brown, supra note 32, at 1399. Professor Brown observed: \textquoteleft\textquoteleft The most vigorous support for it [i.e., the pending bill] came from original parts manufacturers. . . . [T]hey expect to . . . register purely utilitarian objects on the strength of design gimmicks that make the article \textquoteleft distinct in appearance\textquoteleft even if it will never be seen once it
certain to be challenged in international trade forums\(^\text{777}\) and likely to be repealed once the country returned to its competitive senses.

A protectionist venture of this kind\(^\text{778}\) would only lengthen the list of unsolved problems attributable to this unruly legal hybrid and discredit the cause of design protection generally. What the present situation calls for, instead, is prompt enactment of a law like the refined sui generis design bill—meant to be "a model for the whole world"\(^\text{779}\)—that was so inopportune deleted from the General Revision of Copyright Law in 1976.\(^\text{780}\)

III. PREMISES FOR INTERNATIONAL REGULATION OF A DISRUPTIVE LEGAL HYBRID

A. Cyclical Nature of the Design Phenomenon in all Legal Environments

The recurring bouts of over- and underprotection depicted in the preceding pages recapitulate the chequered history of design protection law abroad despite the long period in which American intellectual property law was relatively isolated from continental influences.\(^\text{781}\) On both sides of the Atlantic, one discerns a cyclical pattern in the behavioral response of industrial design to different regulatory approaches. This pattern illuminates the true nature of the design problem, and it suggests that no lasting international solution will emerge from parochial essays that ignore the lessons of the past.

1. Pendular Swings in Domestic Law

The cyclical nature of the United States experience can best be illus-
trated by reference to certain lamp designs that marked turning points in the relevant legal history.\textsuperscript{782} It was, for example, a set of lamps in the shape of dancing figures that dramatically opened the domestic copyright law to works of applied art in 1954,\textsuperscript{783} at a time when judicial hostility to design patents had rendered the statutory design law operationally ineffective.\textsuperscript{784} But the Register's adoption of restrictive legal definitions of applied art—notably the criterion of \textit{scindibilità} or separability\textsuperscript{785}—soon closed the copyright door to modern industrial art,\textsuperscript{786} and lamp designs not representing traditional forms of sculpture were consequently left without any effective protection under federal intellectual property law after 1958.\textsuperscript{787}

In this legislative vacuum, lamp manufacturers, like other design industries, looked to state unfair competition laws for relief against free riders who appropriated innovative product configurations.\textsuperscript{788} In fact, the \textit{Sears-Compco} cases, which reached the Supreme Court in 1964, dealt with nonrepresentational lamp designs that had obtained protection against copying under state laws rooted in the misappropriation rationale.\textsuperscript{789} But when the Supreme Court barred the states from treating slavish imitation as a discrete business tort,\textsuperscript{790} the pendulum thus swung brusquely away from incipient overprotection in state unfair competition law towards chronic underprotection in federal intellectual property law once again.\textsuperscript{791}

While the intellectual property authorities sought legislative enactment of a sui generis design law built on modified copyright principles,\textsuperscript{792} the legal community responded to \textit{Sears-Compco} by pressing federal courts to open copyright law to commercial designs notwithstanding administrative
Beginning in the 1970s, some courts acceded to these pressures, a trend that culminated early in 1976 when a federal district judge held that the streamlined shape of an outdoor parking lamp qualified as a copyrightable work of applied art. The low threshold of originality characteristic of United States copyright law and the principle of nondiscrimination that is deeply rooted in the domestic tradition thus combined to produce full copyright protection for a growing number of commercial designs of everyday objects, including this "high-tech" lamp design, some twelve years after Sears-Compo had ended the protection of comparable designs in state unfair competition laws.

Congress repudiated this and similar decisions a few months later by codifying the separability test for works of applied art without, however, enacting the proposed sui generis design law. On the strength of this codified criterion, a federal appellate court retroactively ejected the outdoor parking lamp from copyright law in 1978, and the prospects for chronic overprotection of industrial designs as copyrightable works of applied art subsided once again. Given the past ineffectiveness of the design patent law, indeed, the pendulum appeared to swing towards another period of chronic underprotection in federal intellectual property law.

In reality, as the empirical evidence surveyed earlier in this Article has shown, countervailing judicial strategies in the 1980s first checked and then reversed the seemingly vulnerable legal status of industrial designs. One influential appellate court tried to expand the availability of copyright protection by devising a more elastic interpretation of the separability criterion itself, an experiment that now seems to have failed. The new appellate tribunal specializing in patent appeals has significantly increased the availability and effectiveness of design patent protection. Above all, the federal appellate courts generally have expanded the protection of product configurations as "appearance trade dress" under section 43(a) of the Lanham Act, with the result that its anticompetitive thrust may actually exceed that of state unfair competition laws prior to the Sears-Compo decisions of 1964.
The full irony of this latest swing of the pendulum appears from two decisions concerning modern designs of halogen desk lamps, imported from Italy, that were handed down in 1987 and 1989, respectively. Under the legislation currently in force, neither the "Tizio" nor the "Dove" lamps qualified for hard protection on hard conditions for a period of fourteen years in design patent law, nor could they have obtained soft protection on soft conditions for a period of seventy-five to one hundred years in literary and artistic property law. A federal district court nonetheless protected both high-tech designs against copying for an indefinite period of time as nonfunctional appearance trade dress under section 43(a) of the Lanham Act. By 1989, in short, lamp designs like that denied copyright protection in 1978 routinely obtained more than copyright law had to offer under federal unfair competition law, even though Congress had refused to grant similar designs even ten years of protection on modified copyright principles in 1976.

Whether industrial designs will continue to receive exorbitant protection in unfair competition law after the Supreme Court's Bonito Boats decision in 1989 remains an open question. Either way, barring appropriate legislative action, the prospects favor continued swings of the pendulum like those that have characterized the treatment of industrial designs in domestic law for the past forty years.

2. Under- and Overprotection in Foreign Law

Taken together, virtually all the industrialized countries have experienced the pattern depicted above in one form or another during the two hun-


805. The "Tizio" lamp had been sold throughout the world and, since 1972, in the United States, where it was the subject of a United States utility patent. The defendant had apparently managed to design around the utility patent even though his product still resembled the Tizio lamp in appearance. Artemide, 672 F. Supp. at 698. Had the manufacturer obtained an enforceable design patent in 1972 (there is no evidence that he tried), it would have expired in 1986 at the latest. See 17 U.S.C. § 173 (1988). As regards the "Dove" lamp, it is not clear whether a design patent would have been granted if sought, given the Tizio design as prior art, although the "Dove" design was good enough to win numerous international awards. The defendant candidly testified that "because no design patent had issued for the Dove, he thought he could sell the Swan [i.e., his copy] freely." PAF, 712 F. Supp. at 399.

806. See supra text accompanying notes 412-75. But see supra text accompanying notes 360-68, 385-91.

807. See supra note 804.

808. See supra notes 369-73 and accompanying text (discussing Esquire, Inc. v. Ringer, 591 F.2d 796 (D.C. Cir. 1978), and other relevant decisions).

809. See supra note 22 and accompanying text.

810. See supra notes 713-24 and accompanying text.
dred year period in which the design problem has plagued world intellectual property law. Although the cyclical movement from underprotection to overprotection and back to underprotection once again tends to occur at different velocities in different legal environments, comparative analysis shows it to be a recurring behavioral characteristic of most developed intellectual property systems.

a. Excesses of the Copyright Approach

Initially, the condition of underprotection stemmed from the assimilation of industrial designs to the full patent paradigm under the aegis of the Paris Convention for the Protection of Industrial Property. Few appearance designs satisfied the test of inventive height characteristic of this paradigm because most designers strive to produce recognizable variations on known models or style trends and seldom take major steps beyond the prior art. Moreover, few commercial designers able to surmount this hurdle could also satisfy the patent law's rigid novelty requirements, which usually oblige inventors to file before testing the market on pain of forfeiture. The strict substantive prerequisites and cumbersome procedures of patent law thus made industrial designs the "poor relation" of both domestic and international industrial property law.

The rigidity of the patent paradigm led the design industries in many countries to seek copyright protection by emphasizing the artistic skills that are but one ingredient of most successful product configurations. Partisans of this approach premise the right to copyright protection on the claim that industrial art is art while stressing that the copyright paradigm forbids discrimination between various art forms on the basis of merit. Because

811. See supra notes 9-12 and accompanying text.
812. See generally Reichman, Designs After 1976, supra note 17, at 366-82 (summarizing findings of the author's earlier comparative studies). The cyclical movement in France occurred before that country converted to the unity of art position late in the 19th century. Since then, the situation has proved remarkably stable despite complaints about chronic overprotection in copyright law. See supra note 500. The significance of this relative stability is examined below. See infra text accompanying notes 900-69.
813. See G. Bodenhausen, supra note 109, at 86 (discussing current version of Paris Convention, supra note 1, art. 5 quinquies); 2 S. Ladas, supra note 1, at 827-40 (discussing evolution of this provision).
814. See supra notes 97-109, 319-20 and accompanying text.
815. See, e.g., Oratler, supra note 564, at 892 (citing and quoting authorities); Crouwel, A Designer's View of Plagiarism, in DESIGN PROTECTION, supra note 8, at 155, 161-62 (stating that, to the designer, "[e]xamples exist to be further developed and copied").
816. See, e.g., 2 S. Ladas, supra note 1, at 832.
817. Id. at 828; see also Benussi, supra note 8, at 61 (stating that "the widespread view that designs are the 'poor relations' of the industrial property family, and of only limited interest from a legal point of view, corresponds to an ever smaller degree with reality").
818. See, e.g., 2 S. Ladas, supra note 1, at 833-36 ("An industrial designer, who must reconcile . . . competing considerations, is . . . part artist, part artisan, and more than a little engineer."); see also Dratler, supra note 564, at 891.
819. See, e.g., 2 S. Ladas, supra note 1, at 831-32; Bougeard, Les origines équivoques de la loi de 1909: Des dessins et modèles au dessin ou modèles, in LES DESSINS ET MODÈLES
Copyright laws everywhere accept low standards of originality and creativity (although seldom as low as those traditionally applied in the United States),\(^8\) the bulk of all appearance designs become potentially eligible for long-term protection on soft conditions once the door swings open in response to such pressures.\(^3\)

The mature copyright paradigm then perversely invests successful designers with market opportunities that are denied to other creators of literary and artistic works. The powerful reproduction rights, strong remedies and long duration of copyright law normally presuppose the existence of an infinite range of variables through which acts of independent creation give expression to the human personality in original works of authorship.\(^4\) In regard to ornamental designs of useful articles, however, the range of variables actually available to would-be innovators is narrowed by an array of external constraints.

For example, the designers’ subjective inputs are conditioned by objective functional requirements and by the need to work within the style trend prevailing for any given class of goods.\(^5\) Other constraints include: standardization; the current emphasis on nonpersonalized, corporate design solutions for mass-produced goods; a need to fulfill consumer expectations concerning marketable designs of particular products;\(^6\) and the growing reliance on human factors engineering, which uses psychological and sociological data to increase the sales appeal of certain products by rendering them more “user friendly” to the relevant class of consumers.\(^7\)

---

EN QuESTION, supra note 8, at 9, 24-32; Cohen Jehoram, Specific Design Protection and Copyright in Benelux and Dutch Law, in DESIGN PROTECTION, supra note 8, at 21, 26 [hereinafter Cohen Jehoram, Specific Protection] (stating that for judges to evaluate the aesthetic character of candidate designs is “an anathema to copyright”).

80. See, e.g., Reichman, Programs as Know-How, supra note 23, at 683-88; Ljungman, The Scandinavian Approach in Design Protection—Aims and Outcome—in Comparison with the New Benelux Legislation, in DESIGN PROTECTION, supra note 8, at 117, 123.


82. See, e.g., 2 P. Goldstein, supra note 28, at 26-31, 116-20.

83. See, e.g., id. at 76; van der Put & Komarnicki, supra note 748; Crouwel, supra note 815. See generally J. Heskett, supra note 493, at 127-44 (“Corporate Design and Product Identity”).


85. See, e.g., D. Ughanwa & M. Baker, supra note 263, at 291; McCoy, Forward, in DESIGNS IN THE INFORMATION ENVIRONMENT 1, 5 (P. Whitney ed. 1985) (stating that designers “must position themselves as the experts at humanizing the machine for their users. . . . [T]he concept of human factors must be expanded [beyond the physical
straints increase the likelihood that different designers will independently arrive at similar results, and they determine the number of design solutions that second.comers must use in order to compete effectively on the relevant market segments. 826

Given the incremental nature of most design innovation, the lack of any obligation to specify copyrightable claims at the time protection arises, and the restricted range of variations available to competitors who need to stay within parameters set by the market, the classical defenses of copyright law lose much of their bite. The first to introduce a commercially successful design onto the market will try to stigmatize the competitors' posterior designs as infringing copies merely because they partake of a general style trend or of a common idea or of other public-domain matter, and these harassing lawsuits are costly to defend. 827 Wary competitors sometimes prefer to work around unprotectable design features rather than face the threat of litigation. 828 Once litigation occurs, even the most laissez-faire courts may incautiously erect barriers to entry around miniscule design variations that second.comers should be able to avoid with equally miniscule variations of their own. 829 The more industrial designers succeed in integrating form and function, moreover, the more likely it becomes that copyright owners can impose variations ostensibly pertaining to form that actually affect the capacity of third parties to imitate noncopyrightable functional components in a cost effective manner. 830

All the risks of overprotection that inhere in equating ornamental


826. See, e.g., Ljungman, supra note 820, at 123; Curtis, supra note 825, at 74-78 (stressing limited number of ways to perform simple tasks, designer's aim to achieve most effective method, and users' demand for consistency of design in computer software packages); see also Menell, An Analysis of the Scope of Copyright Protection for Application Programs, 41 Stan. L. Rev. 1045, 1053-58, 1066-71 (1989).

827. See, e.g., Durham Indus., Inc. v. Tomy Corp., 630 F.2d 905, 910-11 (2d Cir. 1980) (stating that "to extend copyrightability to miniscule variations would simply put a weapon for harassment in the hands of mischievous copiers"); L. Batlin & Son, Inc. v. Snyder, 536 F.2d 486, 488, 492 (2d Cir. 1976) (en banc) (involving lawsuit sought to restrain competitor from using public-domain matter, not just plaintiff's contribution), cert. denied, 429 U.S. 857 (1976); see also 2 P. Goldstein, supra note 28, at 66-71 (criticizing judicial tendency to protect nonoriginal subject matter, including "fundamental design elements" lacking originality or expressive content, in fabric design cases); id. at 78-80 (noting same tendency in regard to three-dimensional toys and dolls).

828. See, e.g., Dratler, supra note 564, at 913-16.

829. See generally Comment, Copyright Protection, supra note 6; cf. Reichman, Programs as Know-How, supra note 23, at 684-85; supra note 827. Most commercial designs will lack the stamp of the creator's personality, which remains a key prerequisite of eligibility in foreign copyright laws. See, e.g., Ljungman, supra note 820, at 123.

830. See, e.g., Pérot-Morel, Specific Protection, supra note 821, at 56-60; cf. Curtis, supra note 825, at 76-78 (stressing subservience of aesthetic values to functional efficiency in modern industrial design influenced by human factors engineering).
designs of useful articles with original works of authorship are then compounded by the copyright owner’s ability to restrict competition on the general products market and not just on the market for artistic objects. This phenomenon confronts the international intellectual property system with a major theoretical anomaly, and it can easily disrupt the overall balance between incentives to innovate and free competition that system aims to mediate.

b. The Two-Market Conundrum

The mature copyright paradigm of the Berne Union countries, with its low threshold of eligibility and its long duration, tends to reward authors and artists more generously than would be the case if the goal of artistic property law were solely to stimulate a sufficient level of investment in the production and dissemination of creative works. This generosity, which exposes copyright law to the criticism of conservative economists, appears in turn to rest on two negative assumptions that tacitly underlie the copyright and patent paradigms, respectively. The first assumption is that the soft modalities of the domestic copyright laws will apply only to the market for literary and artistic works as such and will not, for this reason, disrupt the regulation of industrial property by the patent paradigm. The second negative assumption is that all forms of industrial property that fail to satisfy the strict prerequisites of domestic patent laws (or allied disciplines) should submit to free competition.

831. See, e.g., B. Kaplan, supra note 6, at 55.
832. Foyer, Rapport de synthèse, in Objectif 1992, supra note 46, at 133-34 (stating that copyright law, as applied to true literary and artistic works, is more concerned with the recognition of creators’ rights than with the protection of the investment in given types of production); cf. 1 P. Goldstein, supra note 28, at 6-8 (conceding that copyright law gives more protection than incentive theory alone can justify).
835. See, e.g., Baker v. Selden, 101 U.S. 99, 103 (1879); Fisher Address, supra note 16, at 209 (stating that the copyright law, “with its long term and a whole series of different formalities,” was developed for totally different purposes from those of industrial production and should not be misapplied to the broad scope of American industry).
836. See Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 156, 164 (1989) (stating that the novelty and nonobviousness requirements of the federal patent law “provide the baseline of free competition upon which the patent system’s incentive to creative effort depends”; adding that “Sears and Compco protect more than the right of the public to contemplate the abstract beauty of an otherwise unprotected intellectual crea-
Treating designs of useful articles as copyrightable works of art subverts both of these negative economic premises. For example, adherents of the unity of art thesis disregard the likelihood that the exclusive rights conferred on commercial designs as works of art will enable manufacturers to control exploitation of the material supports in which these designs subsequently become embodied as products. Because products of routine innovation normally escape price competition only on the hard conditions of patent law, the availability of copyright protection for industrial art undermines the proper operation of the patent system. It is "precisely the capacity of applied art to compete in both the market for artistic works and in the general products market that aggravates the design problem; no facile invocation of general principles of copyright law will make this two-market conundrum disappear."

The propensity of industrial designs to violate cardinal economic premises underlying both the patent and copyright paradigms explains the resistance to the unity of art doctrine and the destabilizing impact that doctrine continues to exert on the world's intellectual property system. A "two-market conundrum" also explains the supposed paradox that results from treating ornamental designs of useful articles less favorably than banal commercial paintings sold as home furnishings. The falsity of the paradox resides in the fact that sales of commercially successful paintings do not affect the markets for the material supports in which they are embodied, namely, the markets for canvas, petroleum, and wood products. In contrast, ornamental designs of useful articles, which typically begin life as two-dimensional graphic works like any other commercial paintings, end by...
driving the markets for, say, automobiles, refrigerators, and dental equipment. 841

Given this two-market conundrum, the economically undesirable repercussions that ensue from treating commercial designs as copyrightable works of applied art will vary with the extent to which domestic intellectual property systems succumb to the claim to recognition as art. 842 As copyright protection for designs of useful articles expands, the disruptive effects on the general products market induce countervailing pressures to restrict the scope of protection acquired in the name of art. 843 As protection in copyright law correspondingly contracts, pressures for recognition of industrial art as a legally protectable form of industrial property normally increase once again. 844 Herein lies the perennial fascination with sui generis design protection laws, which virtually all industrialized countries (except the United States) have adopted and which many European Community countries have attempted to reform in recent years. 845 The trouble with these laws, however, is that—with the possible exception of the United Kingdom’s new, unregistered design right 846—they uniformly subject industrial art to a modified patent-law paradigm. 847

841. See, e.g., Fisher Address, supra note 16, at 286 (stating that the “appearance of the container may turn out to be the single most important factor in the marketing, sale, and distribution of the commodity”); see also Comment, Copyright Protection, supra note 6.

842. Contrast, e.g., the broad protection of ornamental designs under Belgian copyright law from 1935 to 1975 with the limited protection afforded similar designs under Netherlands copyright law during the same period, notwithstanding the fact that neither country possessed a special design law at the time. See, e.g., Reichman, Designs After 1976, supra note 17, at 283-97 (“The Benelux Experience”).

843. Id. The case of Belgium from 1935 to 1975 was a prime example. See, e.g., Braun, supra note 46, at 99-101.

844. For example, after the movement to bring commercial designs into international copyright law failed at the Brussels Conference to Revise the Berne Convention in 1948, the sui generis design laws were assigned a new role, and reform legislation became widespread. The adoption of article 5 quinquies at the Lisbon Conference to Revise the Paris Convention in 1958 confirmed this orientation. See Paris Convention, supra note 1, art. 5 quinquies; Reichman, Designs Before 1976, supra note 17, at 1164-67 (citing authorities).

845. See 2 S. Ladas, supra note 1, at 837-40; supra note 4 and accompanying text.

846. Copyright, Designs and Patent Act of 1988 [United Kingdom], supra note 202, Part III, §§ 213-64. “Unregistered design right, or ‘design right’ as it is referred to by the CDPA 1988, is a new hybrid concept which draws upon elements subsisting in copyright, registered designs and patents. Its purpose is to provide residual protection for purely functional designs which do not appeal to the eye and thus do not qualify for artistic copyright or for registration under the RDA (Registered Designs Act of 1949).” R. Merkin, supra note 3, at 360. See also infra notes 948-63 and accompanying text.

847. See supra notes 8, 82-87 and accompanying text. Although the design law of the Federal Republic of Germany was designated a Design Copyright Law, it evolved the typical patent-like standards of eligibility while retaining a relatively soft form of protection. See supra notes 82, 87, 824 and accompanying text; Katzenberger, supra note 505, at 94-96 (stressing requirements of objective-relative novelty and of qualitative originality that “must exceed the average skill of a designer in the field in question”).
c. Failings of the Modified Patent Approach

The typical sui generis design law streamlines some of the procedural inconveniences of the full patent approach while softening its exclusionary tests of eligibility and retaining the strict registration requirements characteristic of industrial property systems. These tests of eligibility, usually cast in terms of novelty and qualitative originality, disfavor small- and medium-sized entrepreneurs who contribute the bulk of today's design innovation.

Unlike the largest firms, which develop a few product lines from scratch, the smaller manufacturers launch myriad designs onto the market each year without knowing in advance which, if any, will capture the public's fancy. In order to maximize protection while fulfilling the novelty requirements of the special design laws, these producers would have to file applications on their entire output. This in turn would oblige them to absorb the costs of preparing elaborate claims as well as substantial publication and registration fees. But when small- and medium-sized producers try to reduce transaction costs by selecting those creations that might better justify such expenditures, they find that they cannot test market their designs without a loss of novelty under the typical sui generis regime.

Once designers spend the sums needed to comply with the sui generis laws, moreover, they often obtain a disappointingly low level of protection. If the novelty test does not strike the design down owing to a premature disclosure or sale prior to filing, then stiff qualitative originality and nonfunctionality requirements as judicially interpreted in most countries will retroactively exclude a large part of the registered designs as unworthy of protection.

Proprietors who survive these formal and substantive challenges

848. See supra notes 8, 78-88, 847 and accompanying text. For recent liberalization of the design law in the Federal Republic of Germany, see supra note 82 and accompanying text. For atypical features of the French design law, which does not penalize disclosure prior to registration, see supra note 81.

849. See supra notes 87, 847 and accompanying text.

850. See infra note 857 and accompanying text.

851. See, e.g., Wibbens, supra note 84, at 258 (stating that “the formal registration requirements—to put it mildly—are intricate and cumbersome,” and the “costs involved . . . are often excessively high for a self-employed designer [under the Uniform Benelux Designs Law of 1975]”); see also Levin, Recent Developments, supra note 87, at 276 (discussing the Nordic Countries).

852. See, e.g., supra notes 83-88 and accompanying text. Japan, however, was an exception, see supra note 82, as was France, see supra note 81. Other exceptions stemming from very recent legislation include the Federal Republic of Germany, see supra note 82, and the United Kingdom, see supra note 846. The standard eligibility requirements convert most special design laws into legal instruments of primary interest to big firms. See infra note 857.

853. See supra notes 87, 847 (citing and quoting authorities). For the surprisingly strict eligibility requirements in the Nordic Countries and the Federal Republic of Germany, see, e.g., Levin, Recent Developments, supra note 87, at 276; Kruger, supra note 393, at 171-76; Katzenberger, supra note 505, at 94-96. But see Kunz-Hallstein, supra note 393, at 71-72 (suggesting that German courts have begun to relax the qualitative origi-
then discover that courts everywhere seem psychologically unprepared to protect design concepts against more than slavish imitation. At their worst, the sui generis design laws operating on modified patent principles either exclude the bulk of the designs they are nominally set in place to protect or provide ineffective and costly protection against misappropriation of a kind that some countries make available—to varying degrees and at various periods—in their laws of unfair competition at a much lower cost. At their best, the special design laws are of primary interest to big firms prepared to spend large amounts on research and development, advertising, and the legal fees necessary to secure systematic design protection. In either case, the exclusion of commercial designs from copyright law on a theory that the creators' needs are met by sui generis design laws all too often turns out to be chimerical because existing laws do not actually cover the bulk of today's design innovation for one reason or another.

The twice excluded designs are thus headed for the public domain, with no certain refuge against free-riding imitations, unless their originators
supplicate at the portals of unfair competition law or attempt to re-enter copyright law through the back door. To the extent that some courts respond to these supplications by stretching unfair competition law, they undermine the policies behind the sui generis design laws and trigger new forms of overprotection that are still more anticompetitive than the exclusive rights of copyright law. Meanwhile, other courts may sooner or later allow copyright law to rescue a few exceptional designs from the flood of refugees, especially if judges perceive their creators to be victims of unjust enrichment. The latest and most clamorous incident of this kind was the decision of the Netherlands Supreme Court to allow copyright protection under domestic law for a design that did not qualify for protection under the Uniform Benelux Designs Law, notwithstanding the express anticompetition clause inserted in the design law to avoid this very result. Once a copyright tribunal agrees to admit some particularly creative design, however, it becomes difficult for succeeding courts to justify treating one set of designs more sympathetically than the rest without byzantine rationalizations that become increasingly arbitrary and protectionist over time. The zig-zag line of decisions certain to result from trying to distinguish copyrightable “works of applied art” from noncopyrightable “industrial designs” under the traditional criteria, and the subtle controversies this breeds, then elicit demands for yet another experiment in full copyright protection of all commercial designs under the “unity of art” banner. When this occurs, the cycle is ready to recommence, with no prospects of breaking out of the historical pattern on the horizon, as the recent experience of the Benelux countries so dramatically reconfirms.

858. See Reichman, Designs After 1976, supra note 17, at 371-72.
859. See, e.g., van Nieuwenhoven Helbach, supra note 522, at 6-8, 12-18 (referring to Netherlands law); supra text accompanying notes 734-45.
860. Compare, e.g., Kieselstein-Cord v. Accessories by Pearl, Inc., 632 F.2d 989, 994 (2d Cir. 1980) (fearing a result that “enables the commercial pirates of the marketplace to appropriate for their own profit, without any cost to themselves, the work of talented designers who enrich our lives with their intuition and skill”) with id. at 999 (Weinstein, J., dissenting) (seeing copying as a purely licit act of competition because “Congress and the Supreme Court had answered in favor of commerce and the masses rather than the artists, designers, and the well-to-do”).
861. See Braun, supra note 46, at 98-106 (discussing the Screenprints decision of May 22, 1987; model of sunscreen for automobiles, denied protection in design law for lack of novelty, was allowed protection in Netherlands copyright law, notwithstanding article 21 of the Uniform Benelux Designs Law, which limits copyright protection under domestic laws to designs having a “marked artistic character”).
863. See Desbois, supra note 7, at 74; Braun, supra note 46, at 98-99; supra notes 502-05 and accompanying text.
864. Nevertheless, the “unity of art” regime in France has remained remarkably stable over time despite its excessive level of protection. See supra note 812; Françon & Pérot-Morel, Conclusion, in Les Dessins Et Modeles En Question, supra note 8. For the significance of this stability in determining a valid future solution, see infra text accompanying notes 899-972.
865. See supra note 861; Braun, supra note 46, at 105-06 (concluding that, notwithstanding article 21 of the Uniform Benelux Designs Law, supra note 4, the way is open for abu-
B. From Industrial Design to the New Technologies

Most commentators still view design protection law as a marginal case that does not challenge the general soundness of the world's intellectual property framework. In retrospect, however, it appears more accurate to view industrial design as a precursor of the many legal hybrids that world intellectual property law would strive to accommodate in the last quarter of the twentieth century. While a thorough analysis of this topic lies beyond the scope of the present Article, it is instructive to identify the ways in which neither industrial designs nor the products of new technologies behave in a manner consistent with the standard assumptions underlying the international patent and copyright systems.

1. Incremental Innovation Bearing Know-How on Its Face

The bulk of today's most valuable innovations flow from incremental improvements in applied scientific know-how. Traditionally, unpatentable industrial know-how remained exempt from free competition only so
long as it was neither voluntarily disclosed nor reverse engineered. In contrast, much of today's most advanced technology enjoys a less favorable competitive position than that of conventional machinery because the unpatentable, intangible know-how responsible for its commercial value becomes embodied in products that are distributed on the open market. A product of the new technologies, such as a computer program or an integrated circuit design, or even a biogenetically altered organism may thus bear its know-how on its face, a condition that renders it as vulnerable to rapid appropriation by second comers as any published literary or artistic work.

From this perspective, a major problem with the kinds of innovative know-how underlying important new technologies is that they do not lend themselves to secrecy even when they represent the fruit of enormous investment in research and development. Because third parties can rapidly duplicate the embodied information and offer virtually the same products at lower prices than those of the originators, there is no secure interval of lead time in which to recuperate the originators' initial investment or their losses from unsuccessful essays, not to mention the goal of turning a profit.

When innovators turn to the world's intellectual property system for relief, however, they find that its dominant paradigms are structured to pro-

871. See, e.g., 3 S. LADAS, supra note 1, at 1617, 1621. In this sense, know-how bears affinities to trade secrets. F. DESSEMONTET, supra note 870, at 11, 18-20, 33-48. But see F. MAGNIN, supra note 869, at 113-16 (stressing the importance of differentiating know-how from trade secrets). The line of demarcation between inventions and know-how is correspondingly uncertain. See Troller, supra note 870, at 151-53, 156-57, 160-64.

872. In simpler days, a conventional manufacturer could "transfer the possession of a new machine without transferring the know-how involved in manufacturing the machine," which would have to be reverse engineered. Galbi, Proposal for New Legislation to Protect Computer Programming, 17 BULL. COPYRIGHT SOC'Y 280, 281 (1969). The protection of traditional forms of industrial know-how is thus entrusted to contracts and trade secret laws, which make acquisition of the pertinent knowledge unlawful only when obtained by means that violate private agreements or that are generally forbidden by law or are against public policy. See, e.g., Troller, supra note 870, at 156 (basing work on comparative surveys of 13 countries, including the United States); see also Kitch, The Law and Economics of Rights in Valuable Information, 9 J. LEGAL STUD. 683, 688-93, 699-701, 711-23 (1980).

873. See Reichman, Programs as Know-How, supra note 23, at 656-60 (citing authorities); Galbi, supra note 872, at 280-81; see also W. KINGSTON, INNOVATION, CREATIVITY AND LAw 122-23 (1989).

874. Owing to its intangible and intellectual nature, know-how remains potentially ubiquitous, like artistic works, despite its embodiment in a tangible medium. See, e.g., F. MAGNIN, supra note 869, at 115-16; Troller, supra note 870, at 151.

875. See generally Reichman, Programs as Know-How, supra note 23, at 658-60. While the know-how embodied in commercial products may still have to be reverse engineered after duplication, the second comer who obtains the physical support can more rapidly accomplish this result than when the desired information remained under lock and key at the factory.
tect "art" and "inventions." Present-day innovation fits imperfectly within either category. Viewed as industrial inventions, advances in the new technologies often appear too incremental and too small in scale to qualify as major breakthroughs under the "nonobviousness" or "inventive step" requirements of patent law. At the same time, these technologies serve impersonal, functional goals that make them alien to the spirit of laws devised to protect literary and artistic works. Today's most economically significant technologies are thus likely to be intermediate technologies that fall between the patent and copyright paradigms.

2. Industrial Design as the Oldest Marginal Case

Those familiar with the legal history of industrial design will observe that the conditions facing innovators working in the new technologies do not represent such a novel constellation in the intellectual property universe as is fashionable to pretend. On the contrary, industrial design and the more recent technologies, such as computer software design, integrated circuit design, and, to some extent, even the products of genetic engineering share a common behavior pattern that deviates from the standard assumptions underlying the dominant paradigms of the world's intellectual property system. This pattern may be characterized as "a proclivity to yield extravagant financial rewards from incremental improvements in know-how that require considerable capital and effort to develop" coupled with "a vulnerability to rapid duplication by competitors who bear no part of the development expenditure."

The problems of providing adequate legal protection for the new technologies thus resemble those that have plagued the design industries for a

877. See Reichman, Programs as Know-How, supra note 23, at 660-61.
878. These technologies are not "intermediate" in the sense this term is also used to connote traditional technologies requiring moderate levels of skill that are appropriate for developing countries to absorb in an integrating world economy. The author regrets this ambiguity but has not found an acceptable alternative for the term "intermediate technologies" as used in this Article.
879. See Reichman, Programs as Know-How, supra note 23, at 662 stating: The fear is that these intermediate technologies, if left to fend for themselves in this nether world between the dominant paradigms, will attract insufficient investment owing to the great risk of loss... in the innovative enterprise and to the likelihood that imitators rather than innovators will reap the rewards of success in the end. Consequently, world intellectual property law has come under intense pressure to alleviate this perceived risk aversion by providing modern innovators with artificial lead time through one legal device or another.
880. See supra text accompanying notes 868-79.
881. Reichman, Programs as Know-How, supra note 23, at 655 (citing authorities).
century or more. The designer's know-how consists in giving physical expression to technical, organizational, and marketing demands and in harmonizing these demands with aesthetic features in products that yield the desired volume of sales within parameters set by the world market. Increasingly, this know-how includes the use of laser holograms, computer-generated displays, and other new techniques, as well as the psychological and sociological inputs of human factors engineering.

Modern industrial design thus concerns intangible products of skilled efforts that are embodied in physical supports and distributed on the open market with little or no possibility of invoking the trade secret laws that otherwise protect nonpatentable innovation. In this respect, the design industries resemble publishers of literary and artistic works who lack autonomous means of preventing free-riders from appropriating the rewards of high-risk investments in creations that obtain commercial success. By

882. See, e.g., E. Manzini, supra note 824, at 54 (stressing the "growing number of actors" and the "mass of knowledge" which makes the individual design contribution largely dependent "on an exchange of information, a capacity to establish contact with those who know how to perform certain other processes") (emphasis supplied); C. Lorenz, supra note 263, at 10-27, 145-49 (stating that in many companies "the industrial designer remains the only person directly in touch with both technology and the consumer"); see also Gray, The Role of Design in Strategic Business Development: Methodology and Case Histories, in DESIGN POLICY, supra note 825, at 32-39.

883. See, e.g., Roy, Product Design and Innovation in a Mature Consumer Industry, in DESIGN POLICY, supra note 825, at 91-97; Draitler, supra note 564, at 890, 892; Truijen, supra note 493, at 145-56.

884. See, e.g., C. Lorenz, supra note 263, at 145 (stressing globalization of products and markets as "an extra stimulus to the emergence of industrial design"). See generally D. Ughanwa & M. Baker, supra note 263. For legal perspectives on the role of market factors, see, e.g., Benussi, supra note 8, at 61-62; Fabiani, La Protezione dell'arte applicata, supra note 18, at 414; 416-17.

885. See, e.g., J. Morris & B. Quest, supra note 3, at 184-89; D. Ughanwa & M. Baker, supra note 263, at 277-95 ("The Impact of Computers on Design").

886. See supra note 825 and accompanying text; see also Doblin, Information and Design: The Essential Relation, in DESIGN IN THE INFORMATION ENVIRONMENT 18-30 (P. Whiting ed. 1985); Curtis, supra note 825, at 76 (stating that the design of a modern user interface for a computer program may require the joint efforts of computer scientists, electrical engineers, computational linguists, graphic designers and human factors experts, among others).

887. See supra note 873 and accompanying text.

888. See supra text accompanying notes 832-47 ("Two-Market Conundrum").

889. Cf. supra notes 874-75 and accompanying text.

890. See supra note 873 and accompanying text. Both works of art and innovative design solutions must capture the public's fancy in order to yield significant economic returns on their respective markets segments, even though designs must also embody functional efficiencies that meet industry standards. The difficulties of predicting the public's fancy are thus a source of high risk aversion to investors in art or design. See infra text accompanying notes 908-10.
the same token, the deepest affinities between industrial design and works of art derive less from their common origins in the arts and crafts tradition \(^{891}\) than from a shared behavioral response to market forces that disrupt the standard legal mechanisms balancing private and public interests in free-market economies. \(^{892}\)

Viewed from this angle, a parallel exists between the failure of certain new technologies to obtain adequate protection under the dominant paradigms of world intellectual property law and the much older and better documented difficulties facing industrial design in that same universe of discourse. In the one case, the patent paradigm will exclude the bulk of today’s costly innovations in applied scientific know-how because they appear to represent slight or merely incremental advances over the prior art. \(^{893}\) In the other case, design innovation normally reflects only small variations on established themes rather than major advances in a designer’s chosen field of endeavor, and these variations look “obvious” in the patent sense even when novel and attractive to consumers. \(^{894}\) In either case, applying the generous modalities of copyright law to protect tangible embodiments of know-how turns out to disrupt the balance between competition and monopoly on the general products market, which is otherwise a function of the strict patent paradigm. \(^{895}\)

The foregoing analysis suggests that any long-term solution to the unsolved puzzle of design protection law is linked with the need for international regulation of the important new technologies falling between the patent and copyright paradigms. \(^{896}\) The drive for a new intellectual property

---

891. See, e.g., C. Lorenz, supra note 263, at 11; Dratler, supra note 564, at 890-91 (deemphasizing aesthetic component while emphasizing other important goals including safety, ease of use, cost of manufacture, ease of repair, and extent to which product is also “fun . . . to use”); see also Hughes, The Philosophy of Intellectual Property, 77 Geo. L.J. 287, 343 (1988) (stressing external constraints that limit the expression of personality in particular forms of intellectual property).

892. When free riders who share none of the risks and burdens of the creative enterprise capture the innovator’s market by selling copies at prices lower than the latter’s own marginal costs, consumers benefit in the short-run by paying less for any particular design solution. The long-run effects become counterproductive if the aggregate investment in product design falls chronically short of the aggregate risk capital needed to sustain healthy levels of international competition based on an innovative mix of aesthetic and technological skills. See generally Brown, supra note 32, at 1386-95; cf. C. Lorenz, supra note 263, at 25 (stressing the proper “marketing mix”). For the ways in which intellectual property law serves to organize markets for the efficient exploitation of intellectual goods, see Lehmann, supra note 263; Ullrich, supra note 263; Kitch, The Nature and Function of the Patent System, 20 J.L. & Econ. 265 (1977).

893. See, e.g., F. Magnin, supra note 869, at 15-16, 121-26; Kingston, Thesis, supra note 869, at 31; Galbi, supra note 872, at 281 (stating that “[t]he patent system can adequately protect inventive concepts; however, the patent law does not have any means of protecting the investment which goes into developing noninventive innovations”).

894. See, e.g., Dratler, supra note 564, at 892; Crouwel, supra note 815, at 161-64, 167.

895. See supra notes 832-47 and accompanying text.

896. See supra note 879.
Design Protection and the New Technologies

regime to protect applied scientific know-how has barely got under way, however, and it will take time to form a consensus concerning the real nature of the problem let alone the difficulties of negotiating internationally acceptable legal machinery to deal with it. Meanwhile, as the oldest and most unruly marginal case in the history of intellectual property law, industrial design has left a long record of failed solutions that are eminently worthy of study, and new design protection laws constitute a kind of living laboratory in which to test solutions that may later acquire much broader applicability.

3. Logic of a Modified Copyright Approach

It follows that reformers could address the regulatory problems posed by the newest legal hybrids with greater confidence if progress were made in curtailing the disruptive effects of the one legal hybrid that has been around for the longest period of time. Assuming that a drive to harmonize the intellectual property laws of the industrialized countries within a GATT Code of Conduct could provide sufficient impetus to make this effort, a logical point of departure is to reexamine the peculiar attraction that the copyright paradigm has continually exerted upon the design hybrid notwithstanding its formal collocation within the Paris Convention for the Protection of Industrial Property.

a. Why Know-How Seeks the Copyright Modality

The persistence with which certain industries exploiting new technologies parrot demands for copyright protection long voiced by sectors of the design industries and their supporters suggests that more is at stake than the mere avoidance of free competition. A plausible explanation is that cer-

897. See generally DIRECT PROTECTION OF INNOVATION (W. Kingston ed. 1987); Reichman, Programs as Know-How, supra note 23, at 660-62, 714-18.


900. See supra notes 1-2, 43-46 and accompanying text.

901. For analogies between industrial designs and artistic works and the criticism they elicit, compare, e.g., E. POUILLET, supra note 502, at 49-54 and Cohen Jehoram, Cumulative Protection, supra note 367 with F. PERRET, supra note 8, at 246 ("By evoking scholastic examples of Benvenuto Cellini's saltcellar or candelabra by Raphael, one has supposedly justified drawing into the orbit of copyright law a body of intellectual products that bear only an apparent resemblance to the creations covered by this regime.") (trans.). Similar analogies between computer programs and literary works stress the
tain regulatory features of the mature copyright paradigm inherently provide a unique response to the needs of these same industries notwithstanding the industrial character of the subject matters at issue. With this hypothesis in mind, one may postulate that the mature copyright paradigm has largely evolved its present physiognomy because it deals with intellectual goods not protectable as trade secrets that require no reverse engineering to appropriate. The dissemination of literary and artistic works to the public in tangible mediums of expression automatically exposes them to refined technologies of copying apt to nullify their creators' natural lead time. The copyright system responds by supplying artificial lead time to all independent creations without regard to merit and without requiring originators to preselect works thought to be worth the costs of formal registration. Wary of unreliable value judgments about

---

902. Although these analogies tend to advance self-serving protectionist claims that weaken the conceptual underpinnings of the world's intellectual property system as a whole, one should not assume that the protective modalities of the copyright paradigm are entirely unsuited to any of these controversial subject matters. See, e.g., Ladd, To Cope With the World Upheaval in Copyright Law, 19 COPYRIGHT 289, 293 (1983) (arguing that international organizations should develop "new kinds of copyright-like protection outside copyright itself" rather than extending traditional copyright law to "technology-containing works"); see also Dietz, Mutation du droit d'auteur-changement de paradigme en matière de droit d'auteur, 138 R.I.D.A. 22-32, 42, 46 (1988).

903. See supra notes 870-75 and accompanying text.

904. See, e.g., Gaubiac, Les nouveaux moyens techniques de reproduction et le droit d'auteur, 123 R.I.D.A. 22, 26 (1986).

905. See, e.g., R. BENKO, supra note 833, at 21: "The currently predominant economic rationale for copyright protection is that . . . knowledge goods . . . create problems of market failure, externalities, and appropriability." See also Landes & Posner, Copyright Law, supra note 833. When the creator is affiliated with smaller- or medium-sized firms and the copier is an oligopolist with distributive power, the latter's copying can reduce the former's natural lead time to minus zero by enabling the copier to arrive on distant markets ahead of the innovator. Cf. International News Serv. v. Associated Press, 248 U.S. 215 (1918).

906. See, e.g., S. RICKETSON, supra note 1, at 231-32; WIPO GUIDE, supra note 368, at 17 ("[M]any national laws . . . provide that . . . works must be original in the sense that they possess creativity. But originality must never be confused with novelty. . . ."). The copyright paradigm thus formulates no doctrinal criteria for distinguishing literary and artistic works worthy of protection from those of lesser merit, in order to avoid unacceptable risks of censorship and judicial bias. See, e.g., A. DIETZ, COPYRIGHT LAW IN THE EUROPEAN COMMUNITY: A COMPARATIVE INVESTIGATION OF NATIONAL COPYRIGHT LEGISLATION 30-31 (1978).

907. See, e.g., Berne Convention, supra note 1, art. 5(2) ("The enjoyment and the exercise of these rights shall not be subject to any formality."); A. DIETZ, supra note 906, at 23.
art and incapable of predicting which of even the most successful authors' future works will capture or recapture the public's fancy, the mature copyright paradigm embraces all literary and artistic works simply by virtue of their being creations and leaves the assessment of merit entirely to the market.

In practice, the exclusive rights of copyright law provide a pecuniary reward only to those authors and artists who successfully explore the public's taste. By securing a winner-take-all return for those relatively few creators able to capture the public's fancy, the copyright incentive overcomes high risk aversion otherwise apt to discourage investment in the dissemination of cultural goods. Unlike the patent paradigm, however, the copyright paradigm never prevents third parties from independently creating works of authorship similar to those already on the market. Nor does copyright law invest authors with any generally recognized right to control the end use of protected works as such. On the contrary, by encouraging third parties to make free and abundant use of nonprotectable matter underlying the protected expression, copyright laws foster a built-in process of

908 See supra note 906; Bleistein v. Donaldson Lithographing Co., 188 U.S. 239 (1903). As regards core literary and artistic works, Bleistein postulates that the act of independent creation manifests the unique personality whose imprint is stamped upon the creative output. However, this postulate often breaks down when applied to borderline utilitarian matter, such as industrial designs and computer programs, for the reason that no personal imprint may be feasible or desirable. See, e.g., Hughes, supra note 891, at 343.

909 See supra note 906 and accompanying text; see also 1 S. LADAS, THE INTERNATIONAL PROTECTION OF LITERARY AND ARTISTIC PROPERTY 269-75 (1938) (explaining why imposition of a legally attributive registration system would cause unacceptable technical forfeitures to artists too poor or too distracted to comply with its procedural intricacies).

910 Apart from direct pecuniary rewards, the exclusive rights of copyright law enable authors to control the environments in which they will allow physical embodiments of their personal expression to circulate. See, e.g., 17 U.S.C. § 106(2)-(3) (1988). The Berne Convention further requires member states to protect moral rights. See Berne Convention, supra note 1, art. 6 bis.

911 Cf. R. BENKO, supra note 833, at 21; supra note 905 (quoting Benko). Arguably, copyright law thus protects the economic fruits of a quasi depletable resource in much the same way that mining claims protect any mineral deposits the prospector is lucky enough to find. Cf. Kitch, supra note 892 (stressing role of prospecting function in patent system). Functionally, this means that legal protection of literary and artistic works often produces a sweepstakes effect. Until commercial success is achieved, the exclusive rights of reproduction, adaptation and public performance enable authors to secure the proceeds arising from unknown but statistically predictable winning entries without requiring them to select particular winning entries in advance. 17 U.S.C. § 106(1)-(2), (4) (1988). Later, these same rights prevent second comers from prematurely siphoning off the fruits of any lucky strike that happens to result and thus permit creators to defray the costs of past failures.

912 See, e.g., Selle v. Gibb, 741 F.2d 896 (7th Cir. 1984); 2 P. GOLDSTEIN, supra note 28, at 19-21. See generally WIPO GUIDE, supra note 368, at 17-18; S. RICKETSON, supra note 1, at 231-32.

913 See, e.g., Baker v. Selden, 101 U.S. 99 (1879); Reichman, Programs as Know-How, supra note 23, at 693 n.288 (discussing droit de destination in context of Baker and citing authorities); see also Brown, Eligibility, supra note 788, at 390.
"reverse engineering" that enables many copyrightable works to cluster around common themes or ideas.914

To the extent that the soft modalities of the copyright paradigm constitute an economic response to the behavior of literary and artistic works under free-market conditions, one may logically postulate that similar modalities of protection would suit technological know-how that behaves in the marketplace like works of art and literature notwithstanding its industrial character.915 From a behavioral standpoint, investors in applied scientific know-how find the copyright paradigm attractive because of its inherent disposition to supply artificial lead time to all comers without regard to innovative merit and without requiring originators to preselect the products that are most worthy of protection. The peculiar modalities of this paradigm then protect the market-determined values of eligible innovation on a nondiscriminatory basis, against copying only, for a lengthy period of time. These same modalities, however, exculpate fair followers who independently fashion their own creations by exploiting the unprotectable ideas revealed in the process of public distribution, a strategy likely to improve the technology available to the public at large.

If these insights proved accurate, it would not follow that either industrial design or the new technologies should obtain all the benefits of the mature copyright paradigm. The opposite is true. Developed with different social purposes in mind, the full copyright paradigm provides too many creations with too much protection for much too long a time to satisfactorily promote technological progress.916 The foregoing analysis does suggest that the legal protection of intermediate technologies as a class could benefit from a judicious adaptation of the copyright modality that did not unduly disrupt the workings of a competitive market for industrial products. The task, in short, is to bring that much of the copyright paradigm to bear on intermediate technologies as will perform needed protective services, while discarding such technical features (and all of the mystique) as are inconsistent with the industrial nature of these same technologies.

b. Measured Exploitation of a Possibly Fatal Attraction

It follows that a copyright approach to intermediate technologies falling between the patent and copyright paradigms could yield unexpected social benefits, even though application of the full copyright paradigm to these same technologies tends to hinder innovation and produce intolerable


915. See supra notes 873-79 and accompanying text. When the length of protection exceeds that needed to induce the appropriate level of investment, consumers are unduly prevented from purchasing lower priced copies of the protected contribution. When the scope of protection is similarly excessive, it unduly inhibits second comers from building on the earlier contribution.

916. See, e.g., Reichman, Programs as Know-How, supra note 23, at 696-98.
burdens on trade.917 By the same token, the most promising solution to the historical quest for a workable design protection law, when viewed in the context of a larger drive to protect advanced technological know-how, consists of a sui generis regime built around modified copyright principles.

(1) Tenets of a Tailor-Made Regime

Ideally, the general provisions of a law or treaty devised for the protection of know-how as such would be supplemented by more specialized legal nuances that took account of the different physical supports in which know-how became embodied and of the market factors pertinent to each class of supports.918 Within this framework, the distinction between aesthetic and functional designs would lose conceptual vitality as the protective boundaries of a new paradigm congealed over time. Because such a solution remains a long way off, however, any present-day reform of design protection law must necessarily retain its autonomous character without the immediate advantages of integration into a larger legal matrix. A transitional reform of this nature should disrupt competition no more than is necessary to augment investment in improving the appearance of products destined for a discriminating global market.

Consistent with this goal, a model design law would make short-term protection of quantitatively creative appearance designs919 easy and cheap to acquire without demanding either absolute novelty or qualitative originality in the patent sense.920 It would thus leave a broad area of routine or generic designs free for the public to use while recognizing an intermediate range of protectable design innovation921 whose value was determined by

917. See supra notes 832-47 and accompanying text.
918. See Reichman, Legal Hybrids, supra note 834.
919. Cf. Durham Indus., Inc. v. Tomy Corp., 630 F.2d 905, 909-11 (2d Cir. 1980) (applying nontrivial variations doctrine of L. Batlin to designs derived from works still in copyright); L. Batlin & Son, Inc. v. Snyder, 536 F.2d 486, 490-92 (2d Cir. 1976) (en banc) (requiring substantial variations for copyrightable reproductions of commercial designs already in the public domain and denying eligibility to products of "physical skills"); see also John Muller & Co. v. New York Arrows Soccer Team, Inc., 802 F.2d 989 (8th Cir. 1986) (holding logo not copyrightable for lack of creative contribution).
920. See, e.g., S. 2075, 86th Cong., 1st Sess. (1959) (O'Mahoney-Wiley-Hart Bill), refining H.R. 8873, 85th Cong., 1st Sess. (1957) (Willis Bill). S. 2075 had been put together by a high-level committee of experts that included Register Arthur Fisher, Barbara Ringer, and Judge Giles Rich. The drafters were determined that a design law should "rest generally on the concept of originality, which in a broad sense can be called the principle of copyright," duly adjusted to reflect a quantitative creativity standard. See Ringer, supra note 790, at 25, 30-31. To qualify for protection, only a minimum degree of creative content was required, but standard, commonplace, or staple designs were expressly excluded. The term of protection was short (five or ten years), registration was allowed within six months from the time the design was "made known," and designs dictated by function or by the purpose of the article embodying it were excluded. See generally Reichman, Designs Before 1976, supra note 17, at 1186-1200 ("Toward an American Regime of Sui Generis Protection").
the market and not by artificial legal standards or by the subjective evaluation of a patent examiner. 922 Within these limits, an autonomous regime should protect eligible combinations of line, shape, color, and texture against copying only but not against independent creation, a result consonant with actual practice under existing design laws despite their patent-like character. 923 This regime would exclude functionally determined design features as such, 924 although it would recognize that the overall image or configuration of most useful articles necessarily combines external visual features with highly utilitarian components. 925

A modern design law should also permit test-marketing and other forms of disclosure prior to registration under a grace period of suitable length, 926 an approach that can be used to exempt candidate designs from registration altogether for a specified period of time. 927 It would make provision for (but not mandate) a marketable certificate of title to a discrete body of innovative matter that could be sold and policed as needed, without necessarily provoking technical forfeiture for a failure to comply with streamlined procedural formalities. 928 At the infringement stage, such a law could recognize an "experimental" or "analytical use" defense that would allow designers to study available models in order to find elbow room on crowded market segments. 929 Defendants that otherwise established independent creation should also avoid liability for copying design features that had become market standards or that were essential to a competitor's ability to enter and stay on particular market segments. 930

In keeping with a modified copyright approach, the proposed regime would not provide moral rights nor would it afford nonsalaried designers the

922. See supra notes 906-14 and accompanying text.
923. See supra notes 853-55 and accompanying text.
924. See, e.g., S. 2075, 86th Cong., 1st Sess. § 2(c) (1959); supra notes 208-10 and accompanying text.
925. See supra text accompanying notes 211-13, 279-302.
926. See, e.g., S. 2075, 86th Cong., 1st Sess. §§ 4, 9(a) (1959); supra notes 82-88, 850-52 and accompanying text.
927. Compare the American design bills of the 1950s, see supra note 920 (providing a six-month novelty grace period and allowing alternative protection under design patent law) with Draft European Design Law, arts. 10-11, published April 3, 1990 by the Max Planck Institute for Foreign and International Patent, Copyright and Competition Law, Munich FRG (allowing a choice between formal protection of up to 25 years by registration or informal protection against slavish imitation for a two-year period). The current design bills pending in the United States would permit a one year grace period between the time a design is made public and the final date of a mandatory application for registration. See, e.g., H.R. 3017, 101st Cong., 1st Sess. (1989); supra note 771.
928. See supra note 927 and accompanying text; cf. Stern, supra note 921, at 1247-49. The bundle of remedies can be varied to reward registration and disclosure without necessarily diluting the bundle of exclusive rights as such.
930. See supra notes 746-57 and accompanying text.
advantages that copyright law confers on commissioned authors and artists.\textsuperscript{931} Above all, the low standard of eligibility would combine with high anticumulative barriers that foreclosed the possibility of long-term, concurrent protection under the full copyright paradigm.\textsuperscript{932} Nevertheless, such a regime could exist side by side with the stricter requirements of a more traditional patent system, in order to accommodate industries that deemed this a valuable option.\textsuperscript{933}

A sui generis law along these lines would, in effect, constitute a ‘‘lead-time’’ law that substituted a very short period of artificial lead time for the lack of natural lead time that occurs under modern marketing conditions.\textsuperscript{934} It would provide a limited form of protection against the appropriation of specific design know-how by technical means of duplication, without pretending to inhibit independent creation and without succumbing to the logic of either ‘‘art’’ or ‘‘inventions.’’

(2) Empirical Models in Search of a Consensus

Models for such a regime are not lacking, even though one looks in vain for any single exemplar on the statute books of the industrialized countries at the present time. For example, the ingenious design protection bill fashioned in the United States during the late 1950s was largely conceived along these very lines.\textsuperscript{935} Had that law been enacted in 1976, even in the slightly shopworn version it acquired after protracted negotiations with special interests, the design problem in this country would appear far more manageable than it does today.\textsuperscript{936} World intellectual property law might also have obtained valuable empirical data bearing on the regulation of the new technologies that have proliferated since the 1960s. In this connection, it is worth noting that the Draft Proposal for a European Community Design


\textsuperscript{932} See Reichman, Designs Before 1976, supra note 17, at 1167-72, 1192-95. If an international consensus were formed around a short-term copyright-like modality, the line of demarcation with other regimes need not remain as intractable as in the past. Given such a consensus, the reduction of technical forfeitures should make courts more likely to respect the chosen line of demarcation in order not to undermine transnational policy goals embodied in the special regime as a whole. However, cumulation in trademark and unfair competition law could remain a problem. See, e.g., Brown, supra note 32, at 1400-01; van Nieuwehoven Helbach, supra note 522, at 12-15.


\textsuperscript{934} See supra text accompanying notes 903-07. The tendency to establish a fifteen-year period in some of the design laws enacted during the 1970s results from an international compromise with no compelling legal logic behind it. See, e.g., Cohen Jehoram, Specific Protection, supra note 819, at 25 (criticizing the compromise figure as too short). The Italian design law, supra note 4, provided only four years of protection when enacted in 1940, i.e., it was a true lead-time law. Although the period was extended to fifteen years in 1977, the initial very short term of duration may explain why invalidation for lack of qualitative originality was rare.

\textsuperscript{935} See S. 2075, 86th Cong., 1st Sess. (1959); supra note 920.

\textsuperscript{936} See supra notes 22, 72-77 and accompanying text.
Law, launched by the Max Planck Institute in 1990, independently arrived at some of the same innovative solutions set out in the American bills of the 1950s. 937

At least three further experiments with a modified copyright approach to advanced technological know-how have found expression in positive law since that lost opportunity in 1976. 938 One was the Semiconductor Chip Protection Act of 1984,939 which other industrialized countries have emulated under pressure from the United States.940 A second was the French decision to protect computer programs under a modified copyright approach,941 in defiance of the "unity of literature" gospel preached by the United States.942 A third was the recent enactment of an unregistered design right as part of the United Kingdom's Copyright, Designs, and Patents Act of 1988.943

In the short run, the French law concerning computer programs seems the most important of these experiments. To be sure, the cryptic measures hurried into law in 1985 lacked the elegance of the design protection bill that the United States Congress debated between 1957 and 1976. The French law on computer programs suffers particularly from inattention to the scope of protection issues that have recently become so prominent in this country.944 But the French law of 1985 takes a critical step forward by recognizing the inherent linkage between "industrial art" and "industrial literature."945 In so doing, it concedes by implication that the full copyright paradigm still governing ornamental designs under that country's regime of total cumulation amounts to overkill.946

In contrast, the decision to protect integrated circuit designs under the United States Semiconductor Chip Protection Act of 1984947 and, more recently, the decision to protect both functional and aesthetic designs under

937. See supra notes 927-28 and accompanying text.
938. See supra text accompanying note 22.
939. See supra note 203.
940. See R. Stern, supra note 205, at 377-444; S.M. Stewart, supra note 201, at 333-42; see also McManis, supra note 205.
942. See supra notes 19-27 and accompanying text. A close parallel thus exists between the United States extension of copyright protection to computer programs and the aberrations that occurred when France pressed the Berne Union Countries to absorb industrial designs into their domestic copyright laws under the "unity of art" rationale. Cf. Foyer, supra note 832, at 138-42 (noting contradictions between treatment of industrial designs and computer programs in French law).
943. See supra note 846.
944. For searching recent criticism on this score, see generally Gaudrat, supra note 941.
945. See supra notes 941-42.
946. See supra notes 43, 942 and accompanying text.
947. See supra notes 203-06 and accompanying text.
the United Kingdom's Unregistered Design Right of 1988,\textsuperscript{948} are mixed blessings at best. On the positive side, these measures constitute tentative steps in the direction of a regulatory system, based on a modified copyright approach, that actually deals with embodiments of technological know-how in tangible mediums of expression. These laws accordingly serve to break the stranglehold of the dominant intellectual property paradigms, they provide new models for the elaboration of future solutions, and they will enrich the pool of empirical data concerning the operational feasibility of nontraditional regimes in general.\textsuperscript{949}

\textsuperscript{948} See supra notes 202, 846; W.R. Cornish, supra note 202, at 190-91 (stressing influence of United States Semiconductor Chip Act on United Kingdom Unregistered Design Act). Prior to 1989, the United Kingdom protected aesthetic designs under either the Registered Designs Act of 1949, supra note 3, which operates on the patent model, or automatically under a terminable copyright, lasting fifteen years, if derived from drawings, sculpture or the like. See Fellner, New U.K. Law, supra note 46, at 371. Functional designs not protectable under the Registered Designs Act of 1949 [RDA 1949], supra note 3, became increasingly protectable under the copyright law if derived from engineering drawings or blueprints, at least until the British Leyland decision of 1986 removed automobile spare parts from copyright law. See Fellner, New U.K. Law, supra note 46, at 372-75; see also R. Merkin, supra note 3, at 361. In contrast, the Copyright, Designs, and Patents Act, 1988, ch. 48, entitled both aesthetic and functional designs to the unregistered design right, in addition to any registered design rights they may or may not retain. Fellner, New U.K. Law, supra note 46, at 376-77. This right arises automatically on fixation, but the level of "originality" to be required by the courts was reportedly unclear in the text of the law and remains to be determined at the time of writing. \textit{Id.} at 377-78, 380. The exclusive right is subject to unique exceptions ("must fit," "must match"), \textit{id.} at 378-79, which are meant to "remove all protection from functional spare parts." R. Merkin, supra note 3, at 362. Duration is 10 to 15 years from fixation or first sale. Fellner, New U.K. Law, supra note 46, at 383. The new law appears to abolish the possibility of cumulation between copyright law and the design rights, but in some cases there may be cumulation between the registered and unregistered design rights. \textit{Id.} at 386-87, 389-91. The Registered Designs Act of 1949, supra note 3, has also been amended, with some possible softening of the eligibility requirements and a lengthening of duration to a minimum of 25 years. See Copyright, Designs and Patents Act, 1988, Part IV, §§ 265-73; R. Merkin, supra note 3, at 308-36. The precise level of "novelty" to be required under the RDA 1949 as amended remains unclear, since the prior requirement of "originality," which meant qualitative originality akin to nonobviousness, was deleted, perhaps without any intention to lower the preexisting standard. See \textit{id.} at 317-18.

The net result of these dispositions cannot be gauged at the time of writing, although there is a clear, if clumsy, attempt to reduce the scope for "unmeritorious," heavily functional designs under the RDA 1949, see \textit{id.} at 318, and to eliminate full copyright protection of purely functional designs altogether. \textit{Id.} at 361. Ms. Fellner regards the new provisions as a move towards the more restrictive regimes of Italy and Germany. See Fellner, New U.K. Law, supra note 46, at 392. However, neither of these regimes operates on modified copyright principles, and they protect functional designs only as utility models subject to relatively stiff formal and substantive requirements. See \textit{supra} notes 8, 82-87, 196-99 and accompanying text.

\textsuperscript{949} See R. Merkin, supra note 3, at 297, stating:

The [U.K.] government . . . rejected the 1983 registration proposals . . . [as] unduly bureaucratic and expensive. It further rejected the introduction of an unfair copying law. . . . Consequently, the government opted for what it described as a "modified copyright approach," which in essence meant the cre-
On the negative side, these legislative responses to sectoral protectionist demands are crafted with the tinkerer's tools and without any unifying goal or concept in mind. They add to the clutter of ad hoc legal initiatives currently being thrown at applied scientific know-how without addressing the hard questions that need to be answered in order to achieve a universally valid approach.\(^\text{950}\) Despite the formal accouterments of intellectual property laws, such measures look like thinly disguised trade barriers that benefit some industries but not others for reasons that defy scientific investigation.\(^\text{951}\) Cumulatively, these laws may undermine free-market principles more than a simple unfair competition law charged with protecting investment in new technologies from misappropriation for a short period of time,\(^\text{952}\) such as the law Switzerland enacted in 1986.\(^\text{953}\)

In the long run, an international intellectual property regime seriously concerned about advanced technological know-how would have to accommodate both aesthetic and functional designs within a common universe of discourse.\(^\text{954}\) That the United Kingdom's new design law already covers both types of designs\(^\text{955}\) undoubtedly gives it a futuristic dimension of considerable experimental interest.\(^\text{956}\) This experiment results, nevertheless, from a concatenation of purely local events and conditions dating back to a legislative miscue in 1968\(^\text{957}\) and to a traditionally restrictive view of unfair

---

\(^{950}\) See Reichman, Programs as Know-How, supra note 23, at 662-67. For example, both the chip laws and the unregistered design law fail to clarify what the appropriate standard of eligibility for purely functional designs should be in a universe of discourse in which comparable designs are traditionally protected as utility models. See supra notes 196-202 and accompanying text; cf. Higashima & Ushiku, A New Means of International Protection of Computer Programs Through the Paris Convention—A New Concept of Utility Models, 7 COMPUTER L.J. 1, 15-22 (1986).

\(^{951}\) See generally Kastenmeier & Remington, supra note 205; Cornish, supra note 226, at 300-09 (critically viewing developments in the United Kingdom).

\(^{952}\) See generally Reichman, GATT Connection, supra note 50, at 875-78; see also Dreyfuss, supra note 898.

\(^{953}\) See supra note 524 and accompanying text.

\(^{954}\) See Reichman, Legal Hybrids, supra note 834.

\(^{955}\) The new right is defined as "a property right which subsists . . . in an original design" and "no distinction is drawn or intended between aesthetic and functional designs; both are intended to be covered." Fellner, New U.K. Law, supra note 46, at 377.

\(^{956}\) See supra notes 846, 848, 948-49.

\(^{957}\) A hurried amendment to the Copyright Act of 1956, known as the Design Copyright Act of 1968, installed a regime of partial cumulation for fifteen years between the copyright law and the Registered Designs Act of 1949, supra note 3, without expressly excluding functionally dictated designs. To very literal minded courts, this opened the door to copyright protection of functional designs depicted in two-dimensional drawings. See, e.g., Stevenson, Protection for Industrial Designs Under the British Copyright Act of 1956, 8 A.P.L.A. Q.J. 369 (1980); Wallace, Protection for Designs in the United Kingdom, 22 BULL. COPYRIGHT SOC'Y 437, 437-39 (1975). The current round of design legislation and its vagaries is largely conditioned by recent judicial decisions limiting copyright protection of industrial designs in response to the notion that reverse
competition law. It thus lacks a theoretical foundation capable of justifying the grant of privileged monopolies, and it is doubly suspect because its privileges are not exchanged for any specified levels of creative activity.

Successful implementations of this law may well depend on the willingness of British courts to devise differentiated standards of eligibility according to the degree of functionality embodied in the particular designs under litigation. Even if courts mustered the technical sophistication needed for this task, however, to attempt such a synthesis in an ad hoc domestic design law having no well-defined subject matter boundaries, no settled standard of eligibility, and no underlying theory of protection seems a formula for mischief that could raise GATT problems and that should not be emulated by the United States.

engineering constitutes infringement; by a government decision to curb prior restraints on trade; and by the resistance of vested interests. See, e.g., R. MERKIN, supra note 3, at 283-98, 360-62; supra note 948; see also Cornish, supra note 226, at 299-306. In contrast, the United States Copyright Office forestalled a similar situation by codifying aspects of Baker v. Selden, 101 U.S. 99 (1879), in § 113(b) of the 1976 Act. See 17 U.S.C. § 113(b) (1988); supra notes 356-59 and accompanying text. Unfortunately, the authorities declined to extend the principles underlying § 113(b) to industrial literature (i.e., computer programs) in the 1976 Act, which leaves the courts to puzzle it out from Baker. See supra notes 23-27 and accompanying text.

958. See, e.g., Cornish, supra note 226, at 306-07 (stressing that copyright law in the United Kingdom had "become one vehicle for preventing specific kinds of misappropriation through copying, and this approach has in part made up for any broad concept of unfair competition").

959. See supra notes 846, 848, 948; W.R. CORNISH, supra note 202, at 384 (predicting that the operative standard will be independent creation). But see Fellner, New U.K. Law, supra note 46 (predicting that courts will read "original" to mean more than independent creation as regards functional designs under the unregistered design law).

960. See supra note 959. But it remains to be seen how judges in the United Kingdom will cope with such a complicated and unorthodox intellectual property regime when they are prevented by tradition from interpreting it in the light of the pertinent legislative history. See Fellner, New U.K. Law, supra note 46. The British courts' approach to eligibility under the unregistered designs law, difficult under the best of circumstances, will be further complicated by the uncertainty surrounding the eligibility standard under the Registered Designs Act of 1949 as amended in 1988. See supra note 948; R. MERKIN, supra note 3, at 316-18.


962. See Reichman, GATT Connection, supra note 50, at 888, stating:

This law necessarily styles itself an intellectual property law for purposes of avoiding the basic GATT discipline under the exceptions of Article XX(d). Yet, it can be construed as protecting purely functional designs under a standard of zero creativity that rewards no innovative activity familiar from the history of intellectual property laws, while proclaiming itself exempt from the national treatment provision that governs all industrial property under the Paris Convention. . . . Protectionist legislation of this ilk arguably uses intellectual property laws to create disguised barriers to trade, contrary to article XX(d) of the GATT and to the express mandate of the Uruguay Round.

Id. (footnotes omitted); see also W.R. CORNISH, supra note 202, at 385-86 (questioning requirement of reciprocity at the expense of national treatment).

963. See supra text accompanying notes 769-80.
Reformers should, instead, concentrate their efforts on devising a more workable sui generis framework for appearance designs without attempting to integrate functional designs into an overall solution until such time as industry itself welcomes disinterested investigation of the rationale underlying a broadened protective regime. Absent a more enlightened consensus concerning the real basis of protection, those countries seeking to harmonize their intellectual property systems within a GATT framework should resolutely exclude functional designs—including structural designs of computer programs—from full copyright protection in all domestic legal systems.

The most logical step would then be to align a sui generis law protecting industrial art on modified copyright principles with a similarly constructed law to protect industrial literature. The successful alignment of appearance designs and computer programs along a single, coherent axis could in turn trigger long-term international decisions to accommodate these and other borderline subject matters within a new, paradigmatic frame of reference supported by an appropriate international convention. Short of this goal, a generic international arrangement to limit technological free-riding could be added to article 10 bis of the Paris Convention as part of a GATT accommodation, and an anti-misappropriation norm of this kind could retain its validity independent of future projects to harmonize design laws or event to regulate the protection of applied scientific know-how as such.

Meanwhile, the need to harmonize copyright laws within the European Community creates a unique opportunity to persuade these countries to adopt a modified copyright approach to their common design problem.

964. The distinction between aesthetic and functional designs is solidly but not uniformly established in present-day domestic legal systems, apart from the United Kingdom's unregistered design right of 1988. See supra notes 846, 948, 959 and accompanying text. At the extreme, French copyright law remains capable of protecting purely functional designs, unless barred by criteria that guard the line of demarcation with patent law. See, e.g., Françon & Pérot-Morel, supra note 864, at 424-26. See generally Pérot-Morel, Specific Protection, supra note 821. Recently, however, French courts have reacted to these excesses by elevating the functionality barrier to the point where many or most utilitarian designs are liable to invalidation under either the Copyright Law of 1985 or the Design Law of 1909, owing to judicial subordination of these laws to the patent law. See Pérot-Morel, Le système français de la double protection des dessins et modèles industriels, in DISEGNO INDUSTRIALE E PROTEZIONE EUROPEA 40, 44-48, 52-54 (1989). The design laws of the Nordic countries tolerate a high incidence of functional content while formally protecting only the exterior aspect of an object; but this is offset by exigent novelty requirements. See Levin, Design Protection in the Nordic Countries—Basic Provisions and Recent Developments, in DISEGNO INDUSTRIALE E PROTEZIONE EUROPEA 139, 141-43 (1989).

965. See supra notes 869-900 and accompanying text.

966. See supra note 899 and accompanying text.

967. For evidence that critical authority in most industrialized countries increasingly disfavors full copyright protection of computer programs, see Reichman, Programs as Know-How, supra note 23, at 714 n.388.

968. See Reichman, GATT Connection, supra note 50, at 876-78, 884-85.
Such an approach would enable leading Berne Union members to break the historical impasse that continues to block serious reform efforts at the international level. It would provide both the European Community and eventually the United States with most of the advantages that France has obtained under the "unity of art" approach, but at a much cheaper cost and without the trade restraints inherent in a regime that systematically overprotects industrial designs. Once implemented, moreover, a sui generis design law along these lines could shed much needed empirical light on the problems of regulating incremental innovation generally, and it could become a model for later, more ambitious efforts to manage the many legal hybrids falling between the patent and copyright paradigms.969

969. See supra notes 866-79 and accompanying text; see also Reichman, Legal Hybrids, supra note 834.