Intellectual Property and the Common Law

Edited By

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At first blush, there would not appear to be much role for the judiciary in the development and evolution of patent and copyright law. The United States Constitution grants Congress authority to enact patent and copyright laws, leaving to courts the more limited role of interpreting the laws.\(^1\) And Congress has acted on that authority, enacting lengthy federal patent and copyright statutes that preclude and largely preempt state statutory and common law protections for inventions and creative expression.\(^2\) But first impressions can be deceiving.

When we examine the substance of modern federal intellectual property (IP) law, the judiciary’s imprint and evolving role are unmistakable and profound. Many critical features of patent and copyright law – such as the limitations on patentable subject matter, the standards for patent infringement (doctrine of equivalents), the standards for copyright infringement, the scope of indirect copyright liability, and many other doctrines (inequitable conduct, copyright misuse) – cannot be found in the United States Code. They exist only in judicial decisions. And several essential

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\(^1\) See U.S Const art 1, § 8, cl. 8; cf. Shyamkrishna Balganesh, The Pragmatic Incrementalism of Common Law Intellectual Property, 63 Vand. L. Rev. 1543 (2010) (observing that “[i]ntellectual property is today thought to be principally of statutory origin. Discussions of the subject invariably revolve around a close scrutiny of the federal statutes involved. Indeed, the frequency with which Congress amends the patent and copyright statutes seems to leave little doubt that it alone determines intellectual property’s precise content and coverage.”); Edward Walterscheid, Understanding the Copyright Act of 1790: The Issue of Common Law Copyright in America and the Modern Interpretation of the Copyright Power, 53 J. Copyright Soc’y 313 (2006) (explaining that there has never been a federal common law of copyright); Wheaton v. Peters, 33 U.S. 591, 661 (1834) (holding that federal copyright protection “originated, if at all, under the acts of Congress”). Prior to 1978, state common law copyright protected unpublished works.

statutory provisions—such as patent law’s nonobviousness requirement and copyright law’s fair use doctrine—were created by the courts and later codified in ways that perpetuate judicial crafting of these doctrines.

The reality of modern IP law thus diverges from the conventional constitutional allocation of lawmaking authority: Congress passes statutes, the executive branch implements them, and the federal judiciary interprets them in adjudicating cases and controversies. By contrast, intellectual property reflects a mixed heritage in which courts, operating in what can most aptly be characterized as a common law mode, came to play a principal role in fleshing out and evolving terse early legislative enactments. Although Congress has partially codified several of these judicial doctrines, the courts continue to play a central, although contextually variable, role in the evolution of IP law. As newer aspects of patent and copyright law have taken on greater legislative specificity, the mix between common law and statutory interpretation has shifted. Nonetheless, it would be a mistake to presume that legislative directive has supplanted the judiciary’s “common law” role in many important areas of federal IP law.

This chapter traces the development and evolution of federal IP law. The history can usefully be broken out into three principal, although somewhat overlapping, phases: (I) the formative period, during which the courts fleshed out the early formulations with relatively broad and deep strokes; (II) the codification period, in which Congress integrated jurisprudence into statutory text while leaving more limited room for judicial innovation; and (III) the modern period, in which interest group politics has generated some highly detailed provisions. The final section of this chapter sketches some of the ramifications of this history for statutory interpretation.

I. THE FORMATIVE PERIOD

Article I, Section 8, Clause 8 of the U.S. Constitution, ratified in 1787, authorized Congress “To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” In the nation’s first State of the Union address, President Washington urged the Congress to exercise this power:

The advancement of agriculture, commerce and manufactures, by all proper means, will not, I trust, need recommendation. But I cannot forbear intimating to you the expediency of giving effectual encouragement as well to the introduction of new and useful inventions from abroad, as to the exertions of skill and genius in producing them at home. . . .

Nor am I less persuaded, that you will agree with me in opinion, that there is nothing which can better deserve your patronage, than the promotion of Science and Literature. Knowledge is in every country the surest basis of publick happiness.³

³ George Washington, State of the Union Address, Journal of the Senate, 1st Cong., 2d Sess. 5 to 8 (Jan. 8, 1790).
Congress soon thereafter established federal protection for “any map, chart, [or] book”\(^4\) and “any useful art, manufacture, engine, machine, or device.”\(^5\) Both of the laws set forth concise general standards for protection, duration, rights, and remedies, but few details. They each totaled fewer than 1,400 words. By comparison, the modern Copyright and Patent Acts span 100,000 and 45,000 words, respectively,\(^6\) although both track many of the original formulations regarding protection standards, rights, and remedies. To a large extent, the first Congress left many of the operational details open, and the courts filled them in using their perception of the constitutional and statutory purposes underlying these laws, experience from protecting other interests, and common law reasoning.

A. Copyright Law

Modeled on England’s Statute of Anne,\(^7\) the Copyright Act of 1790 granted to authors of maps, books, and charts the “sole right and liberty of printing, reprinting, publishing and vending” their works for fourteen years (which could be renewed for an additional fourteen-year term).\(^8\) The Act required that, to enforce such rights, the author must deposit a print copy of such work with the district court in the judicial district in which the author resided and notify the public by posting a notice for four weeks in one or more of the newspapers printed in the United States.\(^9\) The Act did not specify the threshold for protection nor standards for determining infringement. Judges inquired into the general scope and object of Congress as well as English case law to flesh out the Copyright Act.\(^10\) Eaton Drone, author of the leading nineteenth-century copyright treatise, observed,

While, then, the legislature has passed laws for the protection of literary property in books without specifying more definitely the kinds of compositions intended to be included the courts have construed those laws so as to embrace within their protection the entire field of honest literary labor. Hence the literary productions in which valid copyright will subsist are almost if not quite as unlimited in variety as are the productions themselves. Books entitled to the protection of copyright embrace the profoundest work on the universe and the simplest rhyme for the nursery; the most fascinating production of the imagination and the dryest catalogue of names.\(^11\)

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\(^4\) Copyright Act of 1790, 1st Cong., 2d Sess., 1 Stat. 124 May 21, 1790.


\(^7\) Statute of Anne Ch. 19 (1710).

\(^8\) Copyright Act of 1790, § 1.

\(^9\) Copyright Act of 1790, § 3.


\(^11\) See id. at 144.
In explaining the scope of protection in the parts of a work, Drone wrote,

The copyright protects the whole and all the parts and contents of a book. When the book comprises a number of independent compositions, each of the latter is as fully protected as the whole. And so the copyright protects not only the text, but also any engravings, illustrations, figures, &c., contained in the book. The copyright will not extend to any part which is not a proper subject of copyright. But the fact that a part may not be entitled to protection does not affect the copyright in the rest. The copyright is valid to the extent of the matter which will stand all the tests of the law. “The courts of justice,” said Lord Kenyon, “have been long laboring under an error, if an author have no copyright in any part of a work unless he have an exclusive right to the whole book.”

Drawing on his extensive experience with intellectual property cases, knowledge of English case law, common law orientation, and philosophical bent, Justice Joseph Story took a relatively free hand in crafting copyright (and patent) law. Nowhere is this more evident than in his 1841 decision laying the foundation for copyright law’s fair use doctrine:

This is one of those intricate and embarrassing questions, arising in the administration of civil justice, in which it is not, from the peculiar nature and character of the controversy, easy to arrive at any satisfactory conclusion, or to lay down any general principles applicable to all cases. Patents and copyrights approach, nearer than any other class of cases belonging to forensic discussions, to what may be called the metaphysics of the law, where the distinctions are, or at least may be, very subtle and refined, and, sometimes, almost evanescent. In many cases, indeed, what constitutes an infringement of a patented invention, is sufficiently clear and obvious, and stands upon broad and general agreements and differences; but, in other cases, the lines approach very near to each other, and, sometimes, become almost evanescent, or melt into each other. So, in cases of copyright, it is often exceedingly obvious, that the whole substance of one work has been copied from another, with slight omissions and formal differences only, which can be treated in no other way than as studied evasions; whereas, in other cases, the identity of the two works in substance, and the question of piracy, often depend upon a nice balance of the comparative use made in one of the materials of the other; the nature, extent, and value of the materials thus used; the objects of each work; and the degree to which each writer may be fairly presumed to have resorted to the same common sources of information, or to have exercised the same common diligence in the selection and arrangement of the materials. . . . But, then, what constitutes a fair and bona fide abridgment, in the sense of the law, is one of the most difficult points, under particular circumstances, which can well arise for judicial discussion.

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12 See id. (citing English law cases).
13 See Folsom v. Marsh, 9 F. Cas. 342, 344–45 (C.C.Mass. 1841) (Justice Story was sitting as a circuit judge). The decision refers liberally to English precedents under the Statute of Anne.
Throughout the nineteenth and twentieth centuries, courts built the copyright liability regime through common law development. As stated in 1869, “[r]ights secured by copyright are property within the meaning of the law of copyright, and whoever invades that property beyond the privilege conceded to subsequent authors commits a tort. . . .”14 Lacking specific statutory guidance,15 the courts developed and evolved infringement standards using the general purpose of copyright law (“the encouragement of learning”),16 common law experimentation, and pragmatism. Early English cases recognized the importance of protecting pioneering authors while not choking off cumulative creativity – those who build on the knowledge base.17 George Ticknor Curtis, author of an influential early copyright treatise (as well as an even more influential early patent treatise18), explained that the principles on which this kind of [literary] property depends and the doctrines which are already well established in English and American jurisprudence will be found hereafter when fully carried out to extend an adequate and just protection to literature even if such protection is not now administered with all the success that could be desired. In endeavoring to trace the just scope of these principles

14 Lawrence v. Dana, 2 Am. Law T. Rep. (N.S.) 402 (C.C.Mass. 1869); see also Ted Brown Music Co. v. Fowler, 290 F. 751, 754 (2d Cir. 1923) (observed that “[c]opyright infringement is a tort”); Underhill v. Schenck, 238 N.Y. 7, 14, 143 N.E. 773 (1924) (Judge Benjamin Cardozo) (“The author who suffers infringement of his copyright . . . may count upon the infringement as a tort, and seek redress under the statute by action in the federal courts.”). Early tort treatises featured a separate chapter on copyright protection. See, e.g., J. F. Clerk & W. H. B. Lindell, The Law of Torts 587 (2d ed. 1896).

15 See GEORGE TICKNOR CURTIS, A TREATISE ON THE LAW OF COPYRIGHT 240 (1847) (“The statutes which secure the exclusive rights of authors, do not define, in any terms, what shall constitute an infringement of copyright. It is left to the tribunals to decide.”); DRONE, supra note 10, at 383 (“The legislature has not defined piracy, or indicated how far a person may lawfully go in appropriating the results of another’s labors.”). Neither the Copyright Act of 1790 nor the 1831, 1870, and 1909 general revisions provided a formal definition of copyright infringement. See H. Committee Print, 9th Cong., 1st Sess., Copyright Law Revision Part 6, Supplementary Report of the Register of Copyrights on the General Revision of the U.S. Copyright Law; 1965 Revision Bill (May 1965), at 131 (“It seems strange, though not very serious, that the present law lacks any statement or definition of what constitutes an infringement.”). The Copyright Act of 1976, which was the first to include an express infringement provision, states tautologically that “[a]nyone who violates any of the exclusive rights of the copyright owner as provided by sections 106 through 118, or who imports copies or phonorecords into the United States in violation of section 602, is an infringer of the copyright.” 17 U.S.C. § 501(a).

16 The Statute of Anne sought to “encourag[e] learning, by vesting the copies of printed books in the authors or purchasers of such copies.” Statute of Anne Ch. 19 (1710). The Copyright Act of 1790 mirrored that purpose in proclaiming in its preamble “[a]n Act for the encouragement of learning, by securing the copies of maps, Charts, And books, to the authors and proprietors of such copies, during the times therein mentioned.”

17 See, e.g., Cary v. Kearsley, 4 Esp. 168, 170–71 (1803) (“while I shall think myself bound to secure every man in the enjoyment of his copyright, one must not put manacles on science”); Savre v. Moore, 3 East 561 n. (b), 102 Eng.Rep. 139, 140 n. (b) (K.B.1785) (“[W]e must take care to guard against two extremes equally prejudicial: the one, that men of ability, who have employed their time for the service of the community, may not be deprived of their just merits, and the reward of their ingenuity and labour; the other, that the world may not be deprived of improvements, nor the progress of the arts be retarded.”).

18 See infra note 65.
and doctrines we must bear in mind that while the primary object of the law of copyright is protection to the product of all literary labor the interests of knowledge demand a reasonable freedom in the use of all antecedent literature. To administer the law in such a manner as not to curtail the fair use of existing materials in any department of letters is one of the great tasks of jurisprudence. It proposes to itself first the vindication of rights acquired by genius, discovery, invention, and labor in the productions of the mind; secondly the acknowledgment upon motives of public policy of the right to a fair use by any writer of all that has been recorded by previous authors.\textsuperscript{19}

Decades later, Judge Learned Hand would weave the various strands of copyright protection law and policy in formulating an infringement standard that continues to guide courts today.\textsuperscript{20}

Courts drew on the emerging tort doctrines of \textit{respondeat superior},\textsuperscript{21} contributory liability,\textsuperscript{22} and vicarious liability\textsuperscript{23} in fleshing out the scope of copyright liability and standards of proof. They developed standards for originality\textsuperscript{24} and the distinction between unprotectable ideas and protectable expression\textsuperscript{25} in a common law fashion. Courts established and fashioned what came to be known as copyright's work made for hire doctrine based on the rise of the corporation and changes in employment contracting, exposure to a greater range of authorship, the changing nature of copyrightable works and authorship in the industrializing economy (e.g., the emergence of collective works), and evolution in contract default rules.\textsuperscript{26} They also


\textsuperscript{20} See \textit{Nichols v. Universal Pictures Corporation}, 45 F.2d 119 (2d Cir. 1930).

\textsuperscript{21} See \textit{Fishel v. Luekel}, 53 F. 499 (S.D.N.Y. 1892); \textit{American Code Co. v. Bensigner}, 282 F. 829, 834 (2d Cir. 1922) (“The joinder of these parties [publisher, binder, and seller of book] as defendants proceeds upon the theory that infringement of a copyright is a tort, and that all persons concerned therein are jointly and severally liable.”); see generally Peter S. Menell & David Nimmer, \textit{Unwinding Sony}, 95 Cal. L. Rev. 941, 996–1005 (2007) (“Over the course of nearly a century, courts had drawn on the principles of tort liability and the policies of the copyright system to weave a sophisticated web of indirect liability doctrines to address the distinctive challenges of enforcing copyright law.”).

\textsuperscript{22} See \textit{Harper v. Shoppell}, 28 F. 613 (C.C. S.D.N.Y. Sept. 8, 1886); 26 F. 519 (C.C. S.D.N.Y. Feb. 6, 1886).


\textsuperscript{24} See \textit{Bleistein v. Donaldson Lithographing Co.}, 188 U.S. 239 (1903); \textit{Henderson v. Tompkins}, 60 F. 758, 764 (C.C.D. Mass. 1894) (requiring “moderate degree of literary merit” for a dramatic composition); \textit{Curtis, supra} note 15, at 160 n.1, 172 (tracing originality to use of the term “Author” in the Copyright Act and observing that originality must be based on “some substantial product of original thought or labor”).


\textsuperscript{26} See generally Catherine L. Fisk, \textit{Authors at Work: The Origins of the Work-for-Hire Doctrine}, 15 Yale J.L. & Human 1 (2003) (providing a rich contextual account of how the courts shifted from an author-centric conception of initial copyright ownership to recognition of employer and commissioning party \textit{ab initio} rights based on contract principles); compare \textit{Atwill v. Ferrett}, 2 F. Cas. 195 (C.C.S.D.N.Y. 1872).
embroidered various limitations such as the exhaustion principle\textsuperscript{27} into the fabric of copyright law.

B. Patent Law

Although also tracing to 1790, the patent system took an early detour before getting settled on its track. The 1790 Patent Act authorized the granting of a patent for a term not exceeding fourteen years to any person who “invented or discovered any useful art, manufacture, engine, machine, or device, or any improvement therein not before known or used [deemed by the Secretary of State, the Secretary for the Department of War, and the Attorney General, or any two of them] sufficiently useful and important.”\textsuperscript{28} This original formulation of the patent system was, however, short-lived for several reasons. It called on Secretary of State (Thomas Jefferson), the Secretary for the Department of War, and the Attorney General to personally examine patents, which, in light of their other responsibilities, proved untenable.\textsuperscript{29} Second, inventors were displeased with the high and vague threshold for protection: that inventions be deemed “sufficiently useful and important.”\textsuperscript{30}

As a result, in 1793 Congress struck the requirement that inventions be “sufficiently useful and important” and replaced the examination process with a registration system,\textsuperscript{31} leaving the evaluation of patentability entirely to the courts. The Patent Act of 1793 retained a terse standard for patentability: an inventor could patent “any new and useful art, machine, manufacture or composition of matter, or any new and useful improvement on any art, machine, manufacture or composition of matter, not known or used before the application.”\textsuperscript{32} The inventor was still required to provide a written description of the invention and the manner of use “in such full, clear and exact terms, as to distinguish the same from all other things before known, and to enable any person skilled in the art or science, of which it is a branch, or with which it is most nearly connected, to make, compound, and use the same.”\textsuperscript{33}

\textsuperscript{27} See Bobbs-Merrill Co. v. Straus, 210 U.S. 339 (1908) (interpreting the copyright statutes to prevent restraints on alienation following the sale of a copyrighted work); Zechariah Chafee, Equitable Servitudes on Chattels, 41 Harv. L. Rev. 945 (1928) (tracing roots of first sale doctrine to English common law rule against restraints on the alienation of property).

\textsuperscript{28} Patent Act of 1790, § 1.


\textsuperscript{31} Patent Act of Feb. 21, 1793, ch.11, 1 Stat. 318.

\textsuperscript{32} See id. at § 1.

\textsuperscript{33} See id. at § 3.
The courts gave content to and filled in the gaps in this lean statute, drawing heavily on English case law in the early years. In 1818, Justice Story, who would write forty patent law opinions between 1813 and 1845, issued a paper stating,

The patent acts of the United States are, in a great degree, founded on the principles and usages which have grown out of the English statute on the same subject. It may be useful, therefore, to collect together the cases which have been adjudged in England, with a view to illustrate the corresponding provisions of our own laws; and then bring in review the adjudications in the courts of the United States.

In his first patent law opinion, Justice Story, sitting as a Circuit Justice, distinguished between unpatentable elements of motion and “the modus operandi, the peculiar device or manner of producing any given effect” and recognized an experimental use defense based on the inference that “it could never have been the intention of the legislature to punish a man, who constructed such a machine merely for philosophical experiments, or for the purpose of ascertaining the sufficiency of the machine to produce its described effects.” In 1817, he fleshed out the meaning of “useful invention” and novelty. In 1829, Justice Story interpreted the novelty requirement of “not known or used before the application” to pertain only to knowledge or use “by the public.”

The courts also established standards for disclosure, requiring that the patent document identify the patented invention with specificity and distinguish it from the prior art. In the absence of an ex ante examination system, the patent bar developed the patent claim as a means of reducing the risk of an invalidity ruling and of more easily establishing infringement.

Nonetheless, the lack of an examination system eroded faith in the patent system because it led to the proliferation of “unrestrained and promiscuous grants of patent

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36 Whittemore v. Cutter, 29 F. Cas. 1123, 1124 (C.C.Mass. 1813).
37 See id. at 1121.
38 See Bedford v. Hunt, 3 F. Cas. 37, No. 1217 (C.C.D. Mass. 1817) (a useful invention need not “supersede all other inventions now in practice to accomplish the same purpose”).
39 See id. at 37–38 (holding that a patentee must have been the first to invent, which entails reduction to practice); see also Reed v. Cutter, 20 F. Cas. 435 (C.C.D. Mass. 1841).
42 See Joshua D. Sarnoff, The Historic and Modern Doctrines of Equivalents and Claiming the Future, Part I (1790–1870), 87 J. PAT. & TRADEMARK OFF. SOC’Y 371, 384 (2005) (“In response to [Justice Story’s decisions in Lowell v. Lewis and Evans v. Eaton], patent applicants began to include summary language at the end of their specifications that more specifically identified what they regarded as and claimed to be their inventions and what distinguished them from the prior art.”).
privileges.”43 The Senate Report Accompanying the Patent Act of 1836 lamented that “[a] considerable portion of all the patents granted are worthless and void, as conflicting with, and infringing upon one another;” the country had become “flooded with patent monopolies, embarrassing to bona fide patentees, whose rights are thus invaded on all sides;” and the “interference and collision of patents and privileges” had produced ruinous vexatious litigation.44 In response, the Patent Act of 1836 instituted examination in a newly constituted Patent Office, codified claiming conventions that grew out of jurisprudence,45 and introduced other procedural and institutional reforms, but perpetuated the standards of the 1793 Act as interpreted by the courts.

In the century following the 1836 Act, the Supreme Court and lower federal courts established and fleshed out many of the key patent law doctrines: nonobviousness,46 limitations on patentable subject matter,47 written description,48 the doctrine of equivalents,49 the doctrine of abandonment, suppression, or concealment as a limitation on prior art,50 the best mode requirement,51 contributory infringement,52 experimental use exception to the statutory bar,53 and accidental anticipation doctrine.54

As their experience with the patent system and its effects on competition developed, and as concerns about economic concentration grew (and became manifest in the form of antitrust law55), the courts became more skeptical of patent protection. Professor Lawrence Friedman observes that, toward the end of the nineteenth century, the courts seemed “to become keenly aware that a patent could be used to stifle competition [and] they became stingy with preliminary injunctions against infringement.”56 In 1883, Justice Bradley observed that, although inventors of substantial discoveries “are worthy of all favor,”

[I]t was never the object of those laws to grant a monopoly for every trifling device, every shadow of a shade of an idea, which would naturally and spontaneously occur to any skilled mechanic or operator in the ordinary progress of manufactures. Such

45 See N.J. Brumbaugh, History and Purpose of Claims in United States Patent Law, 14 J. Pat. Off. Soc’y 273, 276 (1932) (commenting that the 1836 Act requirement that inventors “particularly specify and point out” their invention “merely endorsed and positively required what inventors had been doing voluntarily for years”).
48 1 O’Reilly v. Morse, 56 U.S. 62 (1853).
50 See Kendall v. Winsor, 62 U.S. 322, 328 (1858).
52 See Wallace v. Holmes, 29 F. Cas. 74, No. 17,100 (C.C. Conn. 1871); Thomson-Houston Elec. Co. v. Ohio Brass Co., 80 F. 712 (6th Cir. 1897).
55 See Sherman Act, July 2, 1890, ch. 647, 26 Stat. 209.
an indiscriminate creation of exclusive privileges tends rather to obstruct than to stimulate invention. It creates a class of speculative schemers who make it their business to watch the advancing wave of improvement, and gather its foam in the form of patented monopolies, which enable them to lay a heavy tax upon the industry of the country, without contributing anything to the real advancement of the art. It embarrasses the honest pursuit of business with fears and apprehensions of concealed liens and unknown liabilities to lawsuits and vexatious accountings for profits made in good faith.\footnote{Atlantic Works v. Brady, 107 U.S. (17 Otto) 192, 200 (1883); see also Densmore v. Scofield, 102 U.S. 375, 378 (1886) ("Patents rightfully issued are property, and are surrounded by the same rights and sanctions which attend all other property. Patentees as a class are public benefactors, and their rights should be protected. But the public has rights also. The rights of both should be upheld and enforced by an equally firm hand, wherever they come under judicial consideration.")}

These concerns no doubt contributed to judicial development of the exhaustion doctrine,\footnote{See The Incandescent Lamp Patent, 159 U.S. 465 (1895).} the enablement doctrine,\footnote{See Motion Picture Patents Co. v. Universal Film Mfg. Co., 243 U.S. 502 (1917).} the patent misuse doctrine,\footnote{See Westinghouse v. Boyden Power Brake Co., 170 U.S. 537 (1898).} the reverse doctrine of equivalents,\footnote{See Woodbridge v. United States, 263 U.S. 50 (1923); Webster Electric Co. v. Splitdorf Electrical Co., 264 U.S. 493 (1924).} and laches.\footnote{See generally Harlan Fiske Stone, The Common Law in the United States, 50 Harv. L. Rev. 4 (1936) (describing the tensions between common law and statutory interpretation at the dawn of the New Deal).}

Throughout the nineteenth century and into the twentieth century, courts fleshed out the skeletal, inchoate early copyright and patent statutes by filling in statutory gaps; integrating constitutional, antitrust, and pragmatic limitations; and drawing on tort and equity principles to effectuate the enforcement of rights. Reflecting the jurisprudential style of those eras and the influence of their common law roots, character, and responsibilities,\footnote{See generally Prager, supra note 35, at 254.} the most influential intellectual property jurists – including Justice Joseph Story,\footnote{Justice Curtis was part of a small circle that took a deep interest and had particular influence on the development of patent law. See Andrew P. Morriss & Craig Allen Nard, Institutional Choice & Interest Groups in the Development of American Patent Law: 1790–1870, 19 Sup. Ct. Econ. Rev. 143 (2011) (observing that "[d]uring most of the nineteenth century, patent law developed in the courts, and instrumental to this development were a relatively small patent bar, a subset of the judiciary, and several repeat parties who played a role in a significant proportion of patent cases."). Justice Curtis brought the doctrine of equivalents into patent law, see Winans v. Denmead, 56 U.S. 350 (1854), and would likely have had further direct influence had he not left the Court in bitterness over the Dred Scott decision. It is perhaps no coincidence that Benjamin Curtis practiced patent law before his appointment to the Supreme Court. See, e.g., Le Roy v. Tatham, 55 U.S. 156, 156 (1852) ("Mr. Justice Curtis, having been of counsel for the defendants in error, upon the letters-patent drawn in question in this case, did not sit at the hearing"); O'Reilly v. Morse, 56 U.S. 62, 63 (1853) ("[M]r. Justice Curtis) having been of counsel [to Samuel F.B. Morse], did not sit in this cause."). His brother, George} Justice Benjamin Robbins Curtis,\footnote{See generally Prager, supra note 35, at 254.} and later Judge

\footnote{Atlantic Works v. Brady, 107 U.S. (17 Otto) 192, 200 (1883); see also Densmore v. Scofield, 102 U.S. 375, 378 (1886) ("Patents rightfully issued are property, and are surrounded by the same rights and sanctions which attend all other property. Patentees as a class are public benefactors, and their rights should be protected. But the public has rights also. The rights of both should be upheld and enforced by an equally firm hand, wherever they come under judicial consideration.")}
Justice Oliver Wendell Holmes, who brought this reasoning into development of copyright’s originality standard, see Learned Hand’s integrated interpretive approach – using common law reasoning and pragmatic insight to explicate terse statutory formulations—established key components of the modern IP system. See, e.g., Sheldon v. Metro-Goldwyn Pictures Corp., 81 F.2d 49 (2d Cir. 1936) (explaining the originality standard in copyright law); Nichols v. Universal Pictures, 45 F.2d 119 (2d Cir. 1930) (articulating a framework for copyright infringement analysis). Judge Learned Hand was renowned for his common law jurisprudence. See, e.g., United States v. Carroll Towing Co. 159 F.2d 169 (2d. Cir. 1947) (establishing what has come to be known as the Hand balancing test for determining negligence).

See William C. Robinson, The Law of Patents for Useful Inventions 15 n. 3 (1890) (“Our patent acts have always depended upon common-law principles for their construction and until recently have been uniformly treated as a part of that great body of theoretical and practical jurisprudence. Patent law is as truly though not so extensively a matter of historical development as the law of real property, and can no more be beneficially administered as a mere statutory system inoperative except where verbally declared, than any other of those ancient branches of the law which we have inherited from our Anglo Saxon ancestors.”).

Justice Oliver Wendell Holmes, who brought this reasoning into development of copyright’s originality standard, see Bleistein v. Donaldson Lithographic Co., 188 U.S. 239 (1903), wrote eloquently about the common law method. See O. W. Holmes, Jr., The Common Law 5 (1881) (“The customs, beliefs, or needs of a primitive time establish a new rule or a formula. In the course of centuries the custom, belief, or necessity disappears, but the rule remains. The reason that gave rise to the rule has been forgotten, and ingenious minds set themselves to inquire how it is to be accounted for. Some ground of policy is thought of, which seems to explain it and to reconcile it with the present state of things; and then the rule adapts itself to the new reasons that have been found for it, and enters on a new career. The old form receives a new content, and in time even the form modifies itself to fit the meaning which it has received.”). Justice Benjamin Cardozo played a role in developing copyright’s infringement standards, see Underhill v. Schenck, 143 N.E. 773, 775 (1924) (“The author who suffers infringement of his copyright commits a tort . . . .”), as well as modern tort law, see, e.g., MacPherson v. Buick Motor Co., 111 N.E. 1050 (1916) (developing the concept of enterprise liability); he took a broad view of the judicial role and the malleability of the common law. See Benjamin N. Cardozo, The Growth of the Law 117–20 (1924) (“Sooner or later, if the demands of social utility are sufficiently urgent, if the operation of an existing rule is sufficiently productive of hardship or inconvenience, utility will tend to triumph.”); Benjamin N. Cardozo, The Nature of the Judicial Process 112 (1921) (“My analysis of the judicial process comes then to this, and little more: logic, and history, and custom, and utility, and the accepted standards of right conduct, are the forces which singly or in combination shape the progress of the law.”).
II. STATUTORY CONSOLIDATION, CODIFICATION, AND REVISION

The patent and copyright statutes underwent relatively modest changes during the middle and latter parts of the nineteenth century. In conjunction with general efforts to codify the laws of the United States, Congress consolidated, codified, and revised copyright law in 1909 and patent law in 1952. Congress extensively codified and revised copyright law in 1976. These statutes brought some of the judicial doctrines into the statutory law – sometimes with but often times without modification and with an intention for courts to perpetuate common law evolution of doctrines that they had developed.

A. Copyright Law

Congress made numerous incremental additions to the Copyright Act throughout the nineteenth and early twentieth centuries. These changes fell into two general categories: (1) expansions and amendments to address new subject matters, requirements, rights, and remedies and (2) general revisions in 1831, 1870, and 1909. Congress enacted an omnibus reform of copyright law in 1976, which both codified some judicial doctrines (such as fair use) and left many judicially crafted doctrines, such as the originality threshold and infringement standards, with the courts.

The Copyright Act of 1909 began the process of integrating judicial doctrines into the copyright statute. The most notable changes to copyright protection were to expand the subject matter of copyright to encompass “all writings” of an author, to extend the renewal term to twenty-eight years, and to create a compulsory license for musical compositions. Congress expressly codified the Supreme Court’s 1908 decision recognizing the exhaustion of rights following sale of a copyrighted work.

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70 See, e.g., Act of Apr. 29, 1802, 7th Cong., 2d Sess., 2 Stat. 171 (adding “historical and other prints” and requiring notice on every copy of a work distributed to the public).
71 See Act of Feb. 3, 1831, 21st Cong., 2d Sess., 4 Stat. 436. Among the principal changes were express protection for musical compositions (but without a performance right) and all types of cuts and engravings and extension of the original term of copyright from fourteen to twenty-eight years.
72 Act of July 8, 1870, §§ 85–111, 41st Cong., 2d Sess., 16 Stat. 198, 212 to 16. The major changes were to expand copyright protection to paintings, drawings, chromolithographs, statues, and “models or designs intended to be perfected as works of fine art” and to transfer copyright administration to the Library of Congress.
75 See Copyright Act of 1909 § 41 (later renumbered as § 27). The House Report states that “Section 41 is not intended to change in any way existing law, but simply to recognize the distinction, long established, between the material object and the right to produce copies thereof.” H.R. Rep. No. 2222, 60th Cong., 2d Sess. (1909).

In 1955, Congress set in motion the process that would eventually yield the Copyright Act of 1976 when it appropriated funds to the Librarian of Congress to study the development and operation of the copyright law.\footnote{See Copyright Law Revision, H.R. Rep. No. 94–1476, at 47 (1976) (hereinafter cited as “1976 Act House Report”).} These studies, prepared by Copyright Office staff, scholars, and practitioners, would provide the backdrop for updating, harmonizing, and rationalizing copyright protection in light of the significant developments in technology and communications since 1909.

Several of the background studies explicated the substantial role that courts had played in fleshing out and evolving the copyright law.\footnote{See, e.g., Alan Latman & William S. Tager, Study No. 25: Liability of Innocent Infringers of Copyrights (Jan. 1958) (tracing the development of indirect infringement doctrines); Alan Latman, Study No. 14: Fair Use of Copyrighted Works (Mar. 1958) (tracing development of the fair use doctrine); Borge Barmer, Study No. 13: Works Made for Hire and On Commission, (Apr. 1958); Abraham L. Kaminstein, Study No. 11: Divisibility of Copyrights (Jun. 1957); George D. Cary, Study No. 12: Joint Ownership of Copyrights (Aug. 1958); Walter J. Derenberg (and members of the New York Law Review), The Meaning of “Writings” in the Copyright Clause of the Constitution, Study No. 3, 83–84 (Nov. 1956) (“Largely unnoticed and unquestioned, the courts have interpreted the copyright provision of the Constitution – far beyond its literal wording. … Writings, thus, are defined not in terms of concrete, tangible forms, but in terms of principles and standards.” (emphasis in original)).} The legislative history leading up to the 1976 Act took note of the judicial role in developing the fair use doctrine and infringement standards.\footnote{See, e.g., Copyright Law Revision Part 6: Supplementary Report of the Register of Copyrights on the General Revision of the U.S. Copyright Law: 1965 Revision Bill IX–XVI (House Comm. on the Judiciary Print) 25, 131 (May 1965).} The final legislation, which was substantially completed by 1965, but which was stalled by discord over how to handle cable television,\footnote{The stalemate over how to address cable television resulted in Congress passing the Sound Recording Amendments Act of 1971 as a stopgap measure to provide federal protection against the growing problem of record piracy. See Act of October 15, 1971, Pub. L. No. 92–140, 92d Cong., 1st Sess., 85 Stat. 391. Protection for sound recordings would be folded into the omnibus legislation passed in 1976.} combines terse statutory standards and codifications of judicial doctrines with highly detailed statutory compromises – particularly the compulsory license provisions. The legislative history expressly instructs courts to perpetuate common law type development of the fair use doctrine.\footnote{See 1976 Act House Report, supra note 70, at 66 (1976) (“The bill endorses the purpose and general scope of the judicial doctrine of fair use, but there is no disposition to freeze the doctrine in the statute, especially during a period of rapid technological change. Beyond a very broad statutory explanation of what fair use is and some of the criteria applicable to it, the courts must be free to adapt the doctrine to particular situations on a case-by-case basis.”).} In other areas, legislative intention for courts to evolve copyright standards can be inferred.\footnote{See id. at 51 (1976) (“The phrase ‘original works of authorship,’ which is purposely left undefined, is intended to incorporate without change the standard of originality established by the courts under the present [1909] copyright statute.”); id. at 61 (“The exclusive rights accorded to a copyright owner under section 106 are ‘to do and to authorize’ any of the activities specified in the five numbered clauses. Use of the phrase ‘to authorize’ is intended to avoid any questions as to the liability of contributory

\footnote{In other areas, legislative intention for courts to evolve copyright standards can be inferred. More generally, Congress drafted the}
bill in general terms so as to provide courts with some flexibility to address inevitable waves of technological change.83

B. Patent Law

After reinstituting patent examination in 1836, Congress added procedural improvements (such as judicial review of Patent Office decisions) and the novelty grace period in 1839.84 Congress did not tinker with patent law again until 187085 when it consolidated and largely recodified the prior legislation.86 The 1870 Act clarified the requirement that inventors “particularly point out and distinctly claim” their inventions and codified the judicially developed best mode requirement.87

infringers.”); id. at 121 (“There is also no need for a specific statutory provision concerning the rights and duties of the coowners of a work; court-made law on this point is left undisturbed. Under the bill, as under the present law, coowners of a copyright would be treated generally as tenants in common, with each coowner having an independent right to use of license the use of a work, subject to a duty of accounting to the other coowners for any profits.”).

The Supplementary Report of the Register of Copyrights from 1965 presciently observed: “Obviously no one can foresee accurately and in detail the evolving patterns in the ways author’s works will reach the public 10, 20, or 50 years from now. Lacking that kind of foresight, the bill should, we believe, adopt a general approach aimed at providing compensation to the author for future as well as present uses of his work that materially affect the value of his copyright. . . . A real danger to be guarded against is that of confining the scope of an author’s rights on the basis of the present technology so that, as the years go by, his copyright loses much of its value because of unforeseen technical advances.

For these reasons, we believe that the author’s rights should be stated in the statute in broad terms, and that the specific limitations on them should not go any further than is shown to be necessary in the public interest. . . .

[It it is becoming increasingly apparent that the transmission of works by nonprofit broadcasting, linked computers, and other new media of communication, may soon be among the most important means of disseminating them, and will be capable of reaching vast audiences.” See Copyright Law Revision Part 6, supra note 77 at 13–14.

With regard to copyrightable subject matter, the House Report accompanying the 1976 Act states: “Authors are continually finding new ways of expressing themselves, but it is impossible to foresee the forms that these new expressive methods will take. The bill does not intend either to freeze the scope of copyrightable subject matter at the present stage of communications technology or to allow unlimited expansion into areas completely outside the present congressional intent. Section 102 implies neither that that subject matter is unlimited nor that new forms of expression within that general area of subject matter would necessarily be unprotected.

The historic expansion of copyright has also applied to forms of expression which, although in existence for generations or centuries, have only gradually come to be recognized as creative and worthy of protection. The first copyright statute in this country, enacted in 1790, designated only “maps, charts, and books”; major forms of expression such as music, drama, and works of art achieved specific statutory recognition only in later enactments. Although the coverage of the present statute is very broad, and would be broadened further by the explicit recognition of all forms of choreography, there are unquestionably other areas of existing subject matter that this bill does not propose to protect but that future Congresses may want to.” 1976 Act House Report, supra note 77, at 51–52 (1976).

85 See generally Dwan & Fiedler, supra note 69.
Congress did not return to patent lawmaking until 1952 when it codified patent law in Title 35 of the U.S. Code and responded to pressure to correct court decisions from the prior two decades that had substantially raised the inventiveness bar. The House Report characterized codification as the “principal purpose” of the bill. One leading treatise observes that “[v]ery ancient statutory language was thus carried over, in a conscious effort to preserve existing statutory interpretations.”

Much of the 1952 Act restated provisions from prior law while integrating, codifying, and in a few instances altering judicial doctrines. It retained the 1793 Act’s text governing patentable subject matter virtually verbatim. The only pertinent difference between the 1793 and 1952 provisions is the substitution of the word “process” for “art.” This alteration was not intended to effect any substantive change or to supplant more than a century of jurisprudence interpreting “art,” but rather to avoid confusion with other uses of the word “art.” Congress carried over the language of § 102(a) from the prior statute, “recognizing that the interpretation excludes various kinds of private knowledge not known to the public.” In explaining § 102(e), the drafters comment that this provision “is another well-recognized condition imposed by a decision of the Supreme Court which was not expressed in the existing law.”

The House Report noted two “major” substantive changes to the substantive patent law: “incorporating a requirement for invention in § 103 and the judicial doctrine of contributory infringement in § 271.” During the 1930s and 1940s, the Supreme Court substantially tightened the judicially developed nonobviousness standard to require a “flash of genius.” In response, Congress formally codified the nonobviousness requirement while lowering the bar to what had previously been recognized by the courts before the 1930s as the appropriate level: whether “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.”

See id. at 6, 17. See id. at 6–7; see also id. at 17 (observing that paragraph (e) enacts the rule of Alexander Milburn Co. v. Davis-Bournonville Co., 270 U.S. 390 (1926)).
Congress also codified judicially developed indirect liability doctrines, although with some adjustment to partially blunt recent expansion in the judicially developed patent misuse doctrine. The legislative history notes that “[t]he doctrine of contributory infringement has been part of our law for about 80 years,” but that “[c]onsiderable doubt and confusion as to [its] scope” have resulted from recent patent misuse cases. In response, Congress expressly recognized the contributory infringement cause of action while codifying an express exclusion for the sale of staple articles of commerce suitable for non-infringing use. The 1952 Act also changed to equitable conditions on reissue and expressly authorized the use of means plus function claims, although with limitations on their scope.

Although the Patent Act of 1952 simplified and fleshed out the patent law, it left many important doctrines free floating in the ether. Even after this codification, the formal patent law still contained no mention of limitations on patentable subject matter, the experimental use exception to the statutory bar, the accidental anticipation doctrine, the doctrine of equivalents, the reverse doctrine of equivalents, the experimental use defense, the exhaustion doctrine, the patent misuse doctrine, the inequitable conduct doctrine, laches, or equitable estoppel.

Thus, although the Copyright of 1976 and the Patent Act of 1952 – the statutory foundations of the current patent and copyright systems – integrated several judicially developed doctrines into statutory law (in some cases with modification), Congress did not intend these enactments to freeze these provisions as enacted, but rather envisioned that courts would continue to evolve aspects of these doctrines. Furthermore, the statutes left many significant doctrines entirely outside of the formal law.

III. THE MODERN ERA

The patent and copyright systems entered a new era in the 1970s, partly as a reflection of larger general changes taking place in legislation, delegation, and judicial interpretive philosophy. Other factors – advances in digital technology and the decision

“paraphrases language which has often been used in the decisions of the courts.” See H.R. Rep. No. 82–1923, at 7(1952); see also id. at 18.


99 See id. (referring principally to Mercoid Corp. v. Mid-Continent Inv. Co., 320 U.S. 661 (1944)).

100 See id.; 35 U.S.C. § 271(c).


103 See generally Sidney A. Shapiro and Robert L. Glicksman, Congress, the Supreme Court, and the Quiet Revolution in Administrative Law, 1988 Duke L.J. 819, 819 (1988) (“In the last decade, the relationship between legislative and judicial control of federal administrative discretion has changed dramatically. In the 1960s and 1970s, Congress continued its long tradition of transferring authority to administrative agencies in broad and relatively standardless delegations. . . . In the 1980s, however, the Supreme Court has adopted a more restrained approach to the review of administrative decisions, restricting or eliminating almost all of the activist techniques previously employed to police agency
to centralize patent law appeals – exerted even greater force on the development of federal IP law.

A. Copyright Law

More than anything else, advances in digital technology have driven copyright law’s modernization. Even before the ink from the Copyright Act of 1976 was dry, the rapid development of a marketplace for computer software, followed in the 1990s by the widespread deployment of digital distribution platforms, thrust the copyright system into the digital age. Congress extended copyright protection to computer software, with the courts mediating that expansion in a manner that addressed the growing piracy concern without bestowing protection on software’s functional features.104 Whereas the first few decades of computer technology had relatively little impact on markets for copyrighted works, cumulative and rapid advances in computer speed, storage capacity, and network technology caused a sea change in the distribution of copyrighted works beginning in the 1990s.105 During that decade, Congress added more text to the Copyright Act than in the entire prior 200 years of the republic. Nonetheless, new controversies would push courts to improvise solutions and fill gaps.

At the outset of the process for revising copyright law in the late 1950s, computer technology was still on the distant horizon. The computer industry was a hardware business in which software typically came with or was custom produced for particular machines and users. Congress was focused on many other issues, such as shifting to a unified term of protection, protecting sound recordings, and dealing with broadcasting. Because of the long gestation of the copyright reform effort, however, legal protection for computer software was a concern for copyright policy makers as the legislation came to fruition. Rather than risk delaying enactment of copyright reform to tackle this new set of challenges, Congress established the National Commission on New Technological Uses of Copyrighted Works (CONTU) in 1974106 for the purpose of recommending “a national policy for both protecting the rights of copyright owners and ensuring public access to copyrighted works when they are used in computer and machine duplication systems.”107

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In 1978, CONTU recommended modest changes to the 1976 Copyright Act to accommodate legal protection for computer software: (1) to make explicit that computer programs, to the extent that they embody an author's original creation, are proper subject matter of copyright and (2) to authorize rightful possessors of copies of computer programs to use or adapt these copies.\textsuperscript{108} The CONTU Report emphasized the importance of applying the judicially developed idea-expression doctrine to ensure that copyright protection did not interfere with technological progress in computer programming.\textsuperscript{109} Congress implemented these changes, with some textual adjustments, in the Computer Software Copyright Act of 1980.\textsuperscript{110}

That put courts in the critical role of adapting copyright law's traditional, judicially developed standards—originality, idea-expression dichotomy, fair use— to the rapidly developing medium of computer software.\textsuperscript{111} Over the course of the next two decades, the courts successfully surmounted the challenge. After some initial missteps that threatened to provide undue legal protection for the first entity to develop computer software for a particular purpose (such as managing a dental laboratory's records),\textsuperscript{112} courts came to apply the idea-expression doctrine and other critical limiting doctrines with greater appreciation of the purposes underlying copyright protection.\textsuperscript{113} Courts also interpreted the scope of the fair use doctrine to permit reverse engineering of copyrighted software for purposes of developing interoperable products.\textsuperscript{114}

The federal courts' success in adapting copyright law to computer software successfully discouraged piracy of software products without unduly hindering innovation and competition.\textsuperscript{115} As a result, there has not been any substantial effort to seek major legislative reform of this aspect of copyright law.\textsuperscript{116} The same cannot

\textsuperscript{108} See CONTU Final Report, \textit{supra} note 107, at 1.
\textsuperscript{109} See id. at 20.
\textsuperscript{114} See Sega Enterprises Ltd. \textit{v. Accolade, Inc.}, 977 F.2d 1510 (9th Cir. 1993).
\textsuperscript{115} See Menell, \textit{supra} note 104.
\textsuperscript{116} Congress did expand the scope of Section 117 to clarify that the creation of copies of a program in the course of maintenance or repair of a computer did not infringe copyright in the program. See 17 U.S.C. \textsect 117(c). See Digital Millennium Copyright Act of 1998, Pub.L. 105–304, Title III, \textsect 302(3).
be said for the challenge posed by digital technology to markets for conventional copyrighted works – movies, sound recordings, and books.

The controversy over the digital distribution of copyrighted works was foreshadowed in the early 1980s by the battle over the video cassette recorder (VCR) that unfolded primarily in the courts. Hollywood motion picture studios brought suit alleging that Sony’s Betamax contributed to infringement by enabling households to record television broadcasts. Borrowing from patent law, the Supreme Court ultimately held that Sony could not be held contributorily liable because its device was capable of substantially non-infringing use. The basis for the decision misapprehended the tort law roots of indirect copyright liability, the relationship of patent and copyright law, the text of the statute, and the legislative history of the 1976 Act, although it reached the proper outcome for this particular technology. These interpretive weaknesses would result in further common law evolution distinguishing and limiting the Sony “staple article of commerce” safe harbor. All the while, Congress has stayed on the sidelines on this particular issue.

Congress sought to craft a digital copyright regime in anticipation of technological change in the early 1990s, although its efforts would miss the target. But even here, litigation provided the spark. As occurred with the introduction of video cassette recording technology in the early 1980s, copyright owners sued the principal manufacturer of digital recording technology, the Sony Corporation, as it brought the first commercial digital audio tape (DAT) device into the marketplace. In the shadow of costly and uncertain litigation (and following Sony’s acquisition of CBS Records, one of the major record labels, in 1987), the various interests resolved their differences through negotiations that culminated in Congress’s passage of the Audio Home Recording Rights Act of 1992. For the first time in the history of copyright, the government imposed technological design constraints on the manufacture of copying devices. This legislation also established a royalty on the sale of devices and blank recording media and afforded immunity for noncommercial use of analog or qualifying digital devices for making copies. This legislation would prove irrelevant as computers and portable computing devices (MP3 players) displaced DAT devices in the marketplace.

The emergence of the Internet as a widespread communication and commercial medium in the mid-1990s presented the next and perhaps greatest challenge for copyright law. The courts once again were at the forefront. In Religious Technology Center v. Netcom On-Line Communication Services, Inc., a copyright owner sued

121 See Recording Industry Ass’n of America v. Diamond Multimedia Systems, 180 F.3d 1072 (9th Cir. 1999) (holding that the AHRA does not apply to MP3 devices).
an Internet access provider (Netcom) and its subscriber, a computer bulletin board service (BBS) hosting a Usenet newsgroup, for direct and indirect copyright liability on the basis of material posted to the newsgroup. Netcom employed an automated system for relaying messages on Usenet groups without any monitoring or control of content. Judge Ronald Whyte determined that “[a]lthough copyright is a strict liability statute, there should still be some element of volition or causation which is lacking where a defendant’s system is merely used to create a copy by a third party.” To hold otherwise would “result in liability for every single Usenet server in the worldwide link of computers transmitting [the poster’s infringing] message to every other computer.” With regard to contributory liability, the court held that when a BBS cannot reasonably verify a claim of infringement – because of “the copyright holder’s failure to provide the necessary documentation to show that there is a likely infringement” or otherwise – then the knowledge element of contributory infringement should be deemed lacking. As to participation, the court concluded that “it is fair, assuming Netcom is able to take simple measures to prevent further damage to plaintiffs’ copyrighted works, to hold Netcom liable for contributory infringement where Netcom has knowledge of [the poster’s] infringing postings yet continues to aid in the accomplishment of [the infringer’s] purpose of publicly distributing the postings.” In so doing, the court established a limited immunity for online service providers (OSPs).

Controversy over the scope of liability of OSPs fed directly into legislative negotiations over what would become the Digital Millennium Copyright Act of 1998 (DMCA). This legislation establishes a series of safe harbors insulating OSPs from liability for various acts, such as transmitting, storing, or linking to unauthorized content, modeled in part on the Netcom decision. It perpetuates the judicial role through its incorporation of judicially developed indirect liability standards. Unfortunately, legislative history is ambiguous on aspects of this role, as reflected in the following language from the Senate Report accompanying the DMCA:

Rather than embarking upon a wholesale clarification of [judicially developed doctrines of contributory and vicarious liability], the Committee decided to leave current law in its evolving state and, instead, to create a series of “safe harbors,” for certain common activities of service providers. A service provider which qualifies for a safe harbor, receives the benefit of limited liability.

123 See id. at 1370.
124 See id. at 1369.
125 See id. at 1374.
126 See id. at 1375.
While clearly articulating an intention to leave the evolution of the doctrines of contributory and vicarious liability to the courts, the report fails to clarify how specific exceptions to the DMCA's safe harbors that use language derived from vicarious liability case law should be interpreted.

The DMCA also established a wholly new regime of anti-circumvention prohibitions designed to assist copyright owners in protecting their works. As an exception to these restrictions, Congress largely incorporated the judicially developed fair use ruling authorizing reverse engineering of computer programs for the “sole purpose of identifying and analyzing those elements of the program that are necessary to achieve interoperability of an independently created computer program.” The anti-circumvention regime does not, however, generally exempt circumvention for fair use purposes.

Technological advance has continued apace, placing courts in the position of interpreting creaky statutory provisions and evolving judicially developed doctrines. The emergence of peer-to-peer file sharing technology barely a year after the DMCA’s enactment confronted courts with a host of challenging questions involving the scope of the DMCA’s OSP safe harbors, the Audio Home Recording Act’s noncommercial use immunity, and the Sony staple article of commerce doctrine.

The hosting of user-generated content confronted courts with another set of challenges, as have efforts to impose liability on those making copyrighted works available without authorization on peer-to-peer networks. Congress has remained on the sidelines during the past decade as the courts have weathered the digital distribution onslaught.

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132 See Reese, supra note 129.
135 See Universal City Studios, Inc. v. Corley, 273 F.3d 429, 452–53 (2d Cir. 2001) (holding that distribution of DVD copying software, even if used to enable owners to play DVDs on Linux computers, is prohibited by the DMCA); 321 Studios v. Metro-Goldwyn-Mayer, Inc., 307 F. Supp. 2d 1085, 1101–03 (N.D. Cal. 2004) (holding liable a provider of software that decrypted a DVD but allowed owners of a DVD only to make a single backup copy).
136 See A&M Records v. Napster, 114 F. Supp. 2d 896 (N.D. Cal. 2000), aff’d 259 F.3d 1004 (9th Cir. 2001); see also MGM Studios, Inc. v. Grokster, Ltd. 545 U.S. 913 (2005); In re Aimster Copyright Litig., 334 F.3d 643 (7th Cir. 2003); cf. Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146 (9th Cir. 2007); Perfect 10, Inc. v. CCBill LLC, 488 F.3d 1102 (9th Cir. 2007); Columbia Pictures Industries, Inc. v. Fung, 96 U.S.P.Q.2d 1620 (C.D. Cal. 2009).
B. Patent Law

Although advances in digital technology also affected the patent system – particularly with regard to the scope of patentable subject matter – Congress’s establishment of the Court of Appeals for the Federal Circuit appears to have had the most profound effects on the patent system.\(^{139}\) Congress sought to provide greater doctrinal consistency and stability by creating a unified, specialized appellate court.\(^{140}\) This new institution has significantly increased the rate at which patents have been upheld\(^{141}\) and expanded the scope of patentable subject matter.\(^{142}\) Perhaps more importantly, it has greatly increased the velocity of patent jurisprudence, heightening the responsiveness of the patent system to perceived problems.\(^{143}\) It also awakened the Supreme Court to problems in the patent system, which has significantly increased its role in steering the patent law.\(^{144}\)

The vast expansion of patenting in the 1990s generated significant concerns about patent quality, anticompetitive patent thickets, and patent “trolls.”\(^{145}\) Comprehensive studies by the Federal Trade Commission and the National Academies of Sciences recommended comprehensive reforms – from tightening the nonobviousness standard to raising the bar for obtaining injunctive relief, clarifying (and tightening) the willfulness standard, and rationalizing the determination of patent damages.\(^{146}\)

Beginning in 2005, Congress took up these and other recommendations (such as expanding postgrant review, moving to a first-to-file system) but struggled to find common ground amidst the cacophony of competing interest groups.\(^{147}\)

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\(^{142}\) See State Street Bank and Trust Company v. Signature Financial Group, Inc., 149 F.3d 1368 (Fed. Cir. 1998); AT&T Corp. v. Excel Commc’ns, Inc., 172 F.3d 1352 (Fed. Cir. 1999); In re Alappat, 33 F.3d 1526 (Fed. Cir. 1994) (en banc).

\(^{143}\) See Ryan Vacca, Acting Like an Administrative Agency: The Federal Circuit En Banc, 76 Missouri L. Rev. 733 (2011) (showing that the Federal Circuit has had the highest rate of en banc rulings across all federal appellate courts between 2000 and 2009 and suggesting that the Federal Circuit is using en banc review as a form of rulemaking akin to that conducted by administrative agencies); see also Tony Dutra, Lawyers, Judges at “Bench & Bar” Conference Explore Mutual Role in Spurring Innovation, BNA’s Patent, Trademark, & Copyright Journal No. 128 (July 5, 2011) (reporting that Chief Judge Randall R. Rader, in his “state of the court address,” commented that the U.S. Court of Appeals for the Federal Circuit was committed to taking important cases en banc to provide more consistent decisions “beyond the next panel”).

\(^{144}\) The Supreme Court reviewed seven patent cases between 1990 and 2000. The Supreme Court doubled that number between 2001 and 2012 (even as its total number of certiorari grants declined).


Meanwhile, the Supreme Court and the Federal Circuit have addressed much of the reform agenda through statutory interpretation and the crafting of judicially created doctrines. The Supreme Court tightened the nonobviousness requirement\textsuperscript{148} and the standard for obtaining injunctive relief.\textsuperscript{149} The Federal Circuit raised the bars for proving willful infringement\textsuperscript{150} and reasonable royalty.\textsuperscript{151} Only after the courts had resolved the most controversial issues dividing interest groups did Congress pass the America Invents Act (AIA) in September 2011.\textsuperscript{152} Although touted as the most significant change in patent legislation since the 1952 Act,\textsuperscript{153} the AIA principally addressed administrative changes in the patent system: a shift to a modified first-to-file system (retaining a grace period for inventor disclosure) and implementation of postgrant review. Congress did not disturb judicial resolution of the most divisive issues—tightening of the nonobviousness standard, a higher threshold for equitable relief, and reining in of reasonable royalty determinations.

IV. THE RAMIFICATIONS OF THE MIXED HERITAGE OF COPYRIGHT AND PATENT LAW FOR THE CONTINUED EVOLUTION OF INTELLECTUAL PROPERTY LAW

As the foregoing has traced, copyright and patent protection emerged in terse formulations during the early republic and has evolved through symbiotic processes of judicial common law–type development, legislative codification and correction, and legislative additions. The rapidity and unpredictability of technological change have buffeted courts with new challenges, and in response they have employed common law tools and functional reasoning to evolve the intellectual property system. This institutional mechanism in the face of Congress’s inability to act expeditiously and lack of sustained focus has enhanced the courts’ substantive imprint on federal intellectual property law.


\textsuperscript{150} See In re Seagate Tech., LLC, 497 F.3d 1360 (Fed. Cir. 2007) (en banc).


The evolution of copyright law’s fair use doctrine and of patent law’s nonobviousness requirement illustrates important symbiotic pathways by which IP law has developed and evolved from its terse original formulation. Justice Story crafted copyright’s fair use defense from the general purposes of the copyright system and English case law. Courts evolved this doctrine over more than a century before Congress brought it into the statute – but with the expressed intention that courts would continue to evolve the doctrine.\(^{154}\) Although the early U.S. patent statutes required only that an invention be novel and useful to be patentable,\(^{155}\) the Supreme Court in 1850 read such a separate inventiveness limitation into the statute based on the intuition that the mere substitution of porcelain for wood or metal in the design of a doorknob, even if novel, lacked the requisite “skill and ingenuity which constitute essential elements of every invention.”\(^{156}\) The courts evolved this doctrine over the course of a century.\(^{157}\) The source of the requirement – whether constitutional, statutory, jurisprudential, or some combination – remained somewhat murky.\(^{158}\) After the Supreme Court elevated the nonobviousness threshold to a “flash of creative genius,”\(^{159}\) Congress stepped in and integrated a nonobviousness standard into the statute, but specifically removed the reference to “creative” or “inventive genius.”\(^{160}\) Courts today focus on the statutory text, but they also reference the historical development of the nonobviousness doctrine.\(^{161}\)

\(^{154}\) See, supra notes 79, 81.


\(^{156}\) See Hotchkiss v. Greenwood, 52 U.S. 248, 266–67 (1850) (“[U]nless more ingenuity and skill . . . were required . . . than were possessed by an ordinary mechanic acquainted with the business, there was an absence of that degree of skill and ingenuity which constitute essential elements of every invention. In other words, the improvement is the work of the skilful mechanic, not that of the inventor.”).


\(^{158}\) See Great Atlantic & Pac. Tea Co. v. Supermarket Equip. Corp., 340 U.S. 147, 156 (1950) (invalidating a patent on a commercially successful mechanical device as “wanting in any unusual or surprising consequences”); Cuno Engineering Corp. v. Automatic Devices Corp., 314 U.S. 84, 91 (1941) (“the flash of creative genius, not merely the skill of the calling”).

\(^{159}\) See H.R. REP. No. 1923, 82d Cong., 2d Sess. 18 (1952) (“The second sentence states that patentability as to this requirement is not to be negatived by the manner in which the invention was made, that is, it is immaterial whether it resulted from long toil and experimentation or from a flash of genius.”).

The courts continue to play a central role in developing these “statutory” regimes. And although the modern statutes have become bloated with detailed and often technical provisions,\textsuperscript{162} fundamental aspects of the copyright and patent regimes trace back to the original statutory enactments, remain relatively terse, and reflect the judicial gloss and fine-tuning that ensued.\textsuperscript{163}

The mixed heritage of IP law has important ramifications for statutory interpretation. In applying IP law, courts should trace the origin of statutory text or doctrine to determine the proper judicial lens – whether to use a common law approach or to focus narrowly on statutory text. In assessing the provenance of statutory provisions, courts should be open to examining legislative history, especially with regard to codification statutes and other amendments intended to explain the nature and purpose of judicially developed doctrines. This use of legislative history does not force courts to follow any particular mode of statutory interpretation, but rather guides them in determining their own role in applying the law. That use largely sidesteps the more controversial issues surrounding legislative history.\textsuperscript{164} There is very little reason to suspect that lobbyists in the period from 1950 to 1952 (with respect to the modern Patent Act) or from 1955 to 1976 (with respect to the modern Copyright Act) were distorting the role of judicial doctrine in the evolution of these systems. There is extensive historical and jurisprudential evidence to corroborate those accounts.\textsuperscript{165}

The copyright studies that formed the basis for omnibus reform were thoughtfully prepared, widely vetted, and thoroughly discussed in open sessions. The patent codification and reform processes were carefully conducted and documented.

The development of copyright and patent law also informs the growing debate over the treatment of so-called common law statutes.\textsuperscript{166} It lends support to Professor

\textsuperscript{162} See David Nimmer, Codifying Copyright Comprehensibly, 51 UCLA L. Rev. 1233 (2004).

\textsuperscript{163} See Nard, supra note 34; William F. Patry, Patry on Copyright, §2.1 (2006) ("Despite the bulk of the Copyright Act, and despite some of the detailed regulatory provisions, critical components of copyright law are judge-made. These components include (1) the nature of originality; (2) the scope of copyright; (3) the nature of the contribution necessary to qualify one as an author; and (4) the elements of and standards for an infringement claim. Fair use, while statutorily recognized in Section 107, remains a creature of common law. The case law that has developed around all these issues is centuries old. Thus, when one refers to ‘interpreting’ the Copyright Act, it is well to keep in mind that the Act is a mixture of statutory and common-law features.” (footnote omitted)); Moy, supra note 91, at §1:17 ("To a degree remarkable in comparison to other statutory areas of the law, patent law has shown a tendency over the last two centuries to develop by case-law decision. Much of this has occurred when the courts have ostensibly been engaged in statutory interpretation. But the courts have shown an unusually large propensity to create new rules of patent law according to their own sense of what fairness requires. In this sense, then, patent law is controlled to a much larger extent by common law and common law principles that are other areas of federal substantive law.” (footnotes omitted)).


\textsuperscript{165} See Omnibus Copyright Revision Legislative History (George S. Grossman ed., 2001); H.R. Rep. No. 82–1923 (1952); Frederico, supra n.89.

\textsuperscript{166} See Frank H. Easterbrook, Statutes’ Domains, 50 U. Chic. L. Rev. 533, 544 (1983) ("The statute books are full of laws, of which the Sherman Act is a good example, that effectively authorize courts to create
Margaret Lemos’s skepticism (see Chapter 4) about labeling statutes as “common law” or “ordinary.”167 Rather than distinguishing between two caricatured buckets, courts should recognize that there can be a spectrum of statutory/common law regimes even within the same statute. The patent and copyright regimes are particularly distinctive in their mixed heritage – tracing back to the founding of this nation when courts played a greater role in fleshing out statutes and evolving through various stages of judicial embellishment and tweaking, legislative codification, and transformative technological change. The analogy to the Sherman Act may be apt for particular judicially developed and legislatively delegated features, but does not make sense for some of the highly specified legislative compromises passed within the past few decades. Courts should be mindful of the provenance and distinctive context by which statutes emerge and develop.

As this chapter has illustrated, the modern copyright and patent regimes can best be understood as rich mosaics – each comprising detailed and specific statutory provisions, open-ended statutory standards authorizing judicial common law development, and important elements still existing entirely outside of the statutory text. Over more than two centuries of statutory accretion, the source and character of the statutory strata have evolved. As a result, tracing the contextual background of particular provisions is essential to interpreting and applying the copyright and patent laws faithfully. Furthermore, a robust, contextually grounded judicial role is critical to maintaining the vitality of the IP system. For these reasons, courts should be especially careful to trace the provenance of copyright and patent provisions and doctrines to determine the proper interpretive lens in applying these laws.

167 See Margaret H. Lemos, Interpretive Methodology and Delegations to Courts: Are “Common-Law Statutes” Different? (in this volume).