

3 US intellectual property rights in historical perspective

I argue that the recent globalization of intellectual property rights originated in the United States. This chapter provides historical background of US IP protection, underscoring just how recent and dramatic the US commitment to stronger IP protection has been. It has effectively reversed about 75 years worth of policy skepticism over the merits of strict IP protection. The chapter discusses the formation of the Court of Appeals for the Federal Circuit (CAFC) in 1982 and its role in changing the domestic environment for patent holders. Several landmark court cases, *Devex v. General Motors* and *Kodak v. Polaroid*, highlight the extent of this change. Furthermore, governmental concerns over competitiveness in the 1980s led to changes in anti-trust policy, documented here, that redounded to the benefit of IP owners. Overall, the historical trends point to a dramatically improved domestic environment for IP owners, and a noteworthy redefinition of US interests in IP protection. These domestic changes paved the way, and provided much of the substance, for the ultimately successful US quest to globalize its new commitment to strict IP protection.

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The United States included intellectual property in the Constitution, Article I, Section 8, which authorized Congress to “promote the progress of Science and the useful Arts by securing for limited times to Authors and Inventors the exclusive right to their respective Writings and discoveries.” The emphasis on “useful Arts” underscores the commercial intent of the legislation and the utilitarian rationale behind it. IP rights

were devised to create incentives for innovation and risk-taking. This is consistent with both Benthamite and Lockean notions of property: “with property rights people have an incentive to labour and industry will prosper” (Drahos, 1996: 201).

Copyrights

The United States passed its first Copyright Act in 1790, which gave citizens and residents a copyright for fourteen years, renewable for an additional fourteen if the author was still alive. During the depression of the 1830s, which ravaged the American book trade as much as it did other economic sectors, cheap magazines and newspapers proliferated and indiscriminately reprinted works of foreign authors without even the pretense of acknowledgment (Feather, 1994: 154). The reprinters’ activities were perfectly legal under US copyright law, which provided no protection for authors not living in the United States.

These practices prompted a group of British authors to petition the US Congress for copyright protection in 1836. They found a sympathetic audience in Senator Henry Clay of Kentucky, who presented the British petition to both the House of Representatives and the Senate. Faced with ardent opposition from a number of American publishers, Clay attempted to mollify the opposition by incorporating a provision “which was to bedevil the American position in international copyright for the rest of the century and beyond” (Feather, 1994: 158). This provision, which came to be known as the “manufacturing clause,” would make the “granting of copyright to foreign authors dependent upon their books being manufactured in the United States” (Feather, 1994: 158). While the law did not pass, the so-called manufacturing clause was resuscitated and incorporated in the Chase Act of 1891 and was not permitted to expire until 1986.

The 1790 Federal Copyright Act, and its successor of 1831, included a provision that copyrights could only be acquired through registration. The law required authors to register their work first, by depositing a copy of the title page with the Register of Copyrights in Washington, and second, after publication by sending a copy of the book to the Library of Congress (Feather, 1994: 166). Years later, this domestic law proved to be inconsistent with the international agreement on copyright, the Berne Convention of 1886, which made the acquisition of copyright by the author/owner automatic upon authorized publication in any member

state. Berne signatories could not require registration as a precondition for granting copyright. Therefore, the United States was excluded from the Berne Convention.

A group of publishers formed the American Copyright League in 1884 to press for domestic and international copyright reform. The exclusion of the United States from the Berne Convention provoked the League in 1887 to undertake a vigorous lobbying effort to change US law in conformity with Berne. Between 1886 and 1890, Congress considered numerous copyright bills but the Democrats opposed each and every one. Democratic supporters, primarily in the South,

were bitterly antipathetic to any measure which would open up American markets to foreign competition, or . . . increase the price of books, as many feared that it would. The opposition was not only political. The publishers of cheap reprint series were against it, and so too were the increasingly powerful trade unions in the printing industry who feared loss of work if the copyright in imported books were protected under American law. It was a concession on the last point which finally allowed the bill to pass, but the same concession caused the continued exclusion of the United States from the growing international consensus on copyright protection. (Feather, 1994: 168)

The final bill, the Chase Act of 1891, incorporated the manufacturing clause first suggested by Senator Clay in 1837. In order to appease the printing workers' unions, foreign authors could obtain US copyright protection only if their work was published in the United States not later than it was published in its country of origin; and foreigners' works had to be printed in the United States, or printed from type set in the United States, or from plates made from type set in the United States (Feather, 1994: 168). This manufacturing clause went directly against the principles of the Berne Convention, which forbade any law that required authors to publish their works in a particular country in order to obtain and protect their rights. Therefore, the United States continued to remain outside the international agreement until 1986, when the clause was finally allowed to expire.¹

¹ Previously the United States had been instrumental in organizing the Universal Copyright Convention. The UCC was adopted at a UNESCO conference in Geneva in 1952 and revised in Paris in 1971. It formalized the use of the universal copyright symbol (the circled 'c'). Though weaker than Berne, the UCC gave countries unwilling or unable to ratify Berne, such as the United States, some measure of international protection for their national authors. See Sell and May (2001).

Twentieth-century copyright

In Jessica Litman's masterful survey of US copyright law (Litman, 1989), she reveals a pattern of incremental change in which private stakeholders draft narrow legislation that favors their interests. The context-specific nature of the legislation has rendered it inflexible and unable to adapt to technological change. Therefore, each time a new technology appears, whether player pianos or computer software, the process repeats itself to the detriment of the public weal. Narrowly tailored, industry-specific provisions are injected, and copyright owners receive broader and more expansive rights. Litman documents the process of negotiated bargains among industry representatives that has resulted in a striking expansion of copyrightable subject matter. As Litman points out:

the dynamics of inter-industry negotiations tend to encourage fact-specific solutions to inter-industry disputes. The participants' frustration with the rapid aging of narrowly defined rights has inspired them to collaborate in drafting rights more broadly. No comparable tendency has emerged to inject breadth or flexibility into the provisions *limiting* those rights. (Litman, 1989: 333; emphasis added)

The legislative process has tended to exclude the public and thereby has privileged the private interests of authors and owners at the expense of the public interest in the use and reuse of copyrighted information (Aoki, 1996: 1310).

Over time, the scope of subject matter eligible for copyright protection has broadened considerably. For example, as Cornish points out, "the major computer lobbyists in the United States pressed for computer programs to be protected by accretion, that is, by treating them as literary works within traditional norms of copyright; and they now have persuaded much of the world to adopt this approach" (Cornish, 1993: 55). Under TRIPS computer programs are protected as "literary works." While some users of copyrighted information have protested this expansion of copyright, the recent trend has been to protect more rather than less.²

The debate over semiconductor chip protection was hotly contested, and exemplified how new technologies complicate the identification of

² For an exception to this trend, see the discussion of the victories of the interoperable developers, such as Sun Microsystems, over the advocates of high-protectionist norms, such as IBM and Microsoft, in Band and Katoh (1995). For the high-protectionist norms advocates' position see Clapes (1993).

intellectual property. In the early 1980s American semiconductor chip manufacturers, faced with escalating competition from Japanese producers, sought to gain protection of the design structure (or "architecture") of semiconductor chips (mask works). They bemoaned the inadequacy of existing IP regimes to protect their products. While they initially sought to obtain patent protection, their chips often failed to meet the requisite standards of novelty and inventiveness (Drahos, 1997). Therefore, they sought protection by accretion into the broader copyright regime. However, user groups, such as the American Association of Publishers (AAP), successfully resisted this effort. The AAP represented a broad group of industries that uniformly opposed copyright protection for semiconductor mask works, "viewing the proposed terms a serious breach of fundamental copyright principles" (Doremus, 1995: 159).

The semiconductor industry reached a consensus to abandon its copyright initiative and instead devised a *sui generis* solution. The Semiconductor Chip Protection Act of 1984 provided an entirely new form of IP protection based in part on copyright, and embodying reciprocity. The Act protected both the mask works, which are fixed in semiconductor chips, and the chips themselves. The Act provided for a short-term, 10-year protection against copying the chip design, and provided such protection only to those foreign nationals whose countries had adopted a similar law. While this was a domestic law, the international ramifications were made quite clear from the outset. The United States broke new ground by extending protection to mask works, and incorporating extensive transition provisions to facilitate reciprocal protection by other countries (Sell, 1998: 136). The TRIPS agreement also includes this *sui generis* protection.

Patents

Throughout most of the nineteenth century, America was a net technology importer. As Merges points out:

some technology was obtained despite foreign intellectual property-type claims. For example, in the early days of steam engine technology, Britain forbade the export of engines, parts, and skilled personnel. The US imported all three regardless. Recognition of British rights might have yielded a net benefit to the US, but that is doubtful. The decision was made in the US that at that stage of economic development, the best policy for the US was lax enforcement of foreign intellectual property. (Merges, 1990: 245)

This preference for weak protection changed in the latter half of the nineteenth century when US firms began to achieve significant technological breakthroughs. Thomas Edison's incandescent carbon filament lamp is but one of the more prominent examples. US firms, such as the Edison Company, pressed for strong IP protection in the negotiations over the Paris Convention in 1883.

The evolution of US patent policies was deeply intertwined with anti-trust.³ The economic power of patents reached its zenith in the *laissez-faire* era at the end of the nineteenth century and the beginning of the twentieth. The Supreme Court elevated patent power in its decision in *Henry v. A. B. Dick & Co.*⁴ in 1912. The A. B. Dick company owned a patent for its mimeograph machine. The company sold its machine with a tag license that required purchasers to buy A. B. Dick's ink, even though the ink was not protected by a patent. This is known as a tying clause whereby the patentee requires purchasers to buy an unpatented article; in anti-trust parlance this is a form of vertical restraint. The Supreme Court condoned this practice and held that a patentee "could extract whatever price or other concession he chose as a consideration for granting a patent license, including the purchase of unpatented articles to be used in conjunction with a patented machine" (Kastriner, 1991: 6). The Court reasoned that had the patentee kept the invention to himself, "no ink could have been sold by others for use upon machines embodying that invention" (244 US 1 (1912) at 33; quoted in Kobak, Jr., 1995).

However, this patent power was short lived. The passage of the Sherman Anti-trust Act ushered in an era of anti-trust dominance, beginning with the Court overruling the *A. B. Dick Case* "with its heavy hand suppressing the patent law," that was to last seventy-five years (Kastriner, 1991: 6). Throughout most of the twentieth century patents were considered to be monopolies rather than necessary incentives for innovation. The concept of patent misuse first arose in 1917, and found its inspiration in Section 3 of the 1914 Clayton Act which expressly forbid tying clauses. In 1917 the Supreme Court reversed the *A. B. Dick* ruling and in *Motion Picture Patent Co. v. Universal Film Mfg. Co.*⁵ "struck down the tying arrangement between a patented movie projector and the use of unpatented film sold by the patentee" (Kastriner, 1991: 18). The Court reasoned that "tie-ins allowed the patent owner to obtain

³ Commonly known as competition policy outside of the United States.

⁴ 244 US 1 (1912). ⁵ 243 US 502, 518 (1917).

de facto 'monopolies' over non-patented claims by extending their patents to cover non-claimable items" (Kobak, 1995: para. 5).

From that time forward, the Court continued to strike down tying arrangements as being inconsistent with the overriding public policy of promoting free competition. Patent rights were construed as monopolies, market power was presumed and these rights were subordinated to the dominant anti-trust policy. The concept of patent misuse reached its zenith in a series of cases in the 1940s, including the *Mercoïd*⁶ cases and *Morton Salt Co. v. G. S. Suppinger Co.*⁷ As Kobak suggests, these decisions "alarmed the patent bar . . . [because] misuse became a *per se* defense that an infringer could successfully use to escape all liability. In this respect it proved to be a real windfall for patent infringers" (1995: para. 7). Referring to the doctrine of patent misuse, William Nicoson complained that "in this welter of opportunity for judicial absolution, it must be a dull rascal indeed who cannot make patent piracy pay" (1962: 92, quoted in *Harvard Law Review*, 1997: at note 21).

This anti-patent environment, characterized by vigorous anti-trust enforcement and judicial attacks on the scope and validity of patents, led US businesses to question the economic value of patent protection. More often than not, the courts presumed patents to be invalid, and patentees were criticized for setting monopoly prices for inventions that were already in the public domain (Dreyfuss, 1989: 6). Would-be domestic competitors had little to fear from infringing behavior. For example, in 1976 when Eastman Kodak sought to develop an instant camera to compete with Polaroid, its development committee issued an internal directive that stated: "Development should not be constrained by what an individual feels is potential patent infringement" (quoted in Silverstein, 1991: 307).

Since patents were frequently held to be invalid and infringers faced low penalties that usually amounted to payment of a royalty, US businesses sought other means of protection from competition, such as trade secret protection, government subsidies combined with high secrecy levels (in defense industries), and "voluntary" export quotas (for the automobile industry) (Silverstein, 1991: 291). However, not all industries could take advantage of these alternative forms of protection and the demise of the US patent system throughout the 1940s and until the early 1980s had deleterious effects in sectors such as consumer electronics. In

⁶ *Mercoïd*, 320 US 661; *Mercoïd Corp. v. Minneapolis-Honeywell Regulator Co.*, 320 US 680 (1944) (sustaining anti-trust liability); and *Mercoïd* 320 US at 669.

⁷ 314 US 488 (1942).

this environment "few American businesses were willing to undertake the financial risks of commercializing new technologies" (Silverstein, 1991: 305). Therefore, while US firms pioneered technologies such as the transistor, the video cassette recorder, and the integrated circuit, other countries, most notably Japan, successfully commercialized these US inventions. In fact, by the late 1960s Japan came to dominate the global consumer electronics market.

The lax US domestic patent environment began to change in 1980 and the Supreme Court signaled a new attitude toward patents. In its ruling in *Dawson Chem. Co. v. Rohm & Haas Co.*,⁸ the Court stated that "the policy of free competition runs deep in our law . . . but the policy of stimulating invention that underlies the entire patent system runs no less deep" (quoted in Kastriner, 1991: 20). For the first time since the *A.B. Dick* case, the Supreme Court placed the public policy of supporting patent rights on an equal footing with the public policy of supporting free competition, and "effectively ended the era of anti-trust dominance over patent law in the eyes of the judiciary" (Kastriner, 1991: 20). The rights of owners of intellectual property became more important as these owners were increasingly likely to deliver economic development and competitiveness objectives valued by the US government.⁹

The creation of the "patent court"

Another important development in the changing judicial approach towards patents was the establishment of the Court of Appeals for the Federal Circuit (CAFC) in 1982. The Court was established as part of the United States' most comprehensive judicial reform. In important respects, the establishment of the CAFC has had unintended consequences that have redounded to the benefit of patent holders and have had a profound effect on the dramatic changes in US policy on intellectual property. The CAFC has resulted in a significant increase in the economic power of patents. While concern for innovation animated some of the debate leading up to the creation of the CAFC, its origins lie in the more pedestrian concerns of docket management and uniformity in the law.

The origins of the CAFC go back to the early 1970s when the appellate court structure became seriously overloaded and many areas of the law lacked national uniformity. Most patent cases were heard in

⁸ 448 US 176 (1980).

⁹ I thank Chris May for urging me to clarify this point.

the various regional circuit courts of appeals, and the Supreme Court was the only court “capable of rendering authoritative declarations of national law” (Lever, 1982: 186). With the appellate system under untenable pressure, with a five-fold increase in court filings between 1962 and 1981 – from just under 5,000 cases to over 26,000 cases (Lever, 1982: 186, note 30), and mounting docket congestion at the Supreme Court, a 1972 study group – the Freund Committee – recommended the creation of a National Court of Appeals. That same year, Congress created the Hruska Commission to evaluate the appellate system and recommend changes. Like the Freund Committee, it also recommended a National Court of Appeals. The Hruska Commission highlighted the inability of the appellate court system to definitively adjudicate issues of national law, which had the effect of rendering the law uncertain and unpredictable. An undesirable consequence was rampant and costly forum shopping among the circuit courts of appeal; the Hruska Commission concluded that the problem was most acute in the area of patent law. While the two groups’ proposals went nowhere, the insights provided by the Hruska Commission resurfaced in subsequent reform deliberations.

The Justice Department revisited the issue of judicial reform in 1977, and in 1978 issued a memorandum that ultimately became the basis for the creation of the CAFC. The memorandum called for a merging of the Court of Claims and the Court of Customs and Patent Appeals to create a single forum for patent cases. Congress vigorously debated the proposed establishment of the CAFC for several years. Congress passed the bill creating the Court in March 1982 and President Reagan signed it into law on April 2, 1982.

The debates over the creation of the CAFC are instructive in so far as they provide insight into the diagnosis of the “patent problem” and anticipate the proposed benefits of such a court. The central problem that CAFC advocates identified was uneven application of patent law in the various circuit courts. Some circuits favored infringers, whereas others favored patentees. For example, between 1945 and 1957, a patent was nearly four times more likely to be enforced in the Seventh Circuit than in the Second Circuit (Dreyfuss, 1989: 7). Infringers scrambled to have their cases heard in the lenient circuit courts, whereas patentees fought to have their cases heard in the stricter Fifth, Sixth, and Seventh Circuits. Forum shopping, and requests to have patent infringement appeals transferred to different circuits, injected considerable uncertainty into patent litigation. When 250 US companies engaged in industrial research

were surveyed by the Industrial Research Institute on the question of a single patent court, the vast majority of respondents indicated that the uncertainty, complexity, and inconsistencies in patent enforceability eroded the full economic value of the patent (Lever, 1982: 198 at note 61). In this convoluted legal environment patents could not be considered sufficient incentives to invest in research and development (Dreyfuss, 1989: 7). Furthermore, forum shopping increased the length and cost of litigation, and made it difficult for patent attorneys to advise clients.

The stakes rose sharply after the 1972 Supreme Court decision in *Blonder-Tongue Laboratories Inc. v. University of Illinois Foundation* which barred a patent owner from re-litigating patent validity against a new defendant: “This meant that a patent owner had only ‘one bite at the apple’; if the case were tried in an anti-patent forum, the owner stood to lose not merely the one lawsuit but his entire patent” (Silverstein, 1991: 309). In this high stakes and inherently unpredictable environment, proponents of a CAFC argued that a single court would eliminate forum shopping and inconsistent court rulings, provide more uniformity in patent law and thereby facilitate innovation by reducing doubt as to what protection is available for inventions (Lever, 1982: 198–199).

Opponents of the CAFC questioned the extent to which inter-circuit conflict existed, and argued that claims of forum shopping were exaggerated. They also raised concerns that a patent court, like any specialized court, might be prone to isolation and susceptibility to special interest groups (Lever, 1982: 202). If the court were to become either pro-patent or anti-patent, the dangers of concentrated judicial decisionmaking power could have a negative impact on the law (Lever, 1982: 203–204). In the end, supporters of the CAFC addressed most of the objections raised by opponents. Most importantly, they were able to dispense with fears attendant to specialized courts because the CAFC’s docket would not be limited to patents alone but would encompass tariff and customs law, trademarks, technology transfer regulations, and government contract and labor disputes (Lever, 1982: 204).

Since the CAFC’s establishment in 1982, decisions of the court have not only consolidated technical and legal criteria for determining patent infringement, but have raised substantially the level of damage and royalty compensation awarded to successful patent-owner litigants. The activation of the CAFC has ushered in a more vigorous approach to the enforcement of patent holders’ rights. The CAFC’s decisions have reflected a more pro-patent approach and have supported higher damage

awards than the decisions of previous Courts of Appeal. The CAFC has invigorated the presumption of validity of patent rights, "making the challenger's case harder to sustain" (Dreyfuss, 1989: 26). Parties challenging the validity of a patent now have "the burden of establishing invalidity by 'clear and convincing' evidence" (Kastriner, 1991: 11). Under the CAFC, references to patents as "monopolies" have all but disappeared (Kastriner, 1991: 9).

In terms of enforcement, the CAFC has raised the costs of infringement substantially. The CAFC has enabled patentees to receive much higher compensatory damages by adopting new methods of computing lost profits or reasonable royalties; it has awarded patentees lost profits from the sale of related goods and allows patentees to include the drain on human and financial resources in calculating lost profits (Dreyfuss, 1989:19). Permanent injunctions against infringers are now available to patentees immediately upon successfully establishing validity and infringement at trial (Kastriner, 1991: 12). Overall, the CAFC has been a good court for patentees (Dreyfuss, 1989: 26).

The Supreme Court has also contributed to this improved legal environment for patent holders. In 1982 the Court handed down a landmark decision in *General Motors v. Devex*. Prior to the *Devex* decision, in infringement cases in which the patent owner prevailed, interest would be awarded from the date of infringement (as opposed to the date of judgment) *only* in exceptional cases. Under the old system successful litigants could not expect compensation based on damages from the date of actual infringement, but only from the much later date of the court's decision. *Devex* reversed this, and now prejudgment interest is common in infringement cases in which the patent owner prevails. Furthermore, since the *Devex* holding, numerous patent infringement awards have included "staggering" amounts of prejudgment interest (Whipple, 1987: 110).

Two CAFC decisions, in 1983 and 1986 respectively, have had additional important effects. In *Smith International v. Hughes Tool* (1983), the court emphasized that since a patent right is the right to exclude others, courts should feel free to grant permanent injunctions once a patent has been held valid and infringed. This signaled a further shift in public policy in favor of patent holders in so far as the court ruled that "public policy favors 'protection of rights secured by valid patents,' adding that 'public policy favors the innovator, not the copier'" (Kastriner, 1991: 13–14). This is clearly a far cry from the earlier judicial suspicion of the monopoly aspects of patent rights.

However, the CAFC perhaps made its greatest mark in its 1986 decision in *Polaroid Corp. v. Eastman Kodak*. Polaroid was suing Kodak for infringing Polaroid patents for instant cameras. The US District Court of Massachusetts found that Kodak had indeed infringed the Polaroid patents and, relying on the *Smith International* case, issued an injunction barring Kodak from further infringement. Kodak protested and argued that the injunction would force it to lay off 800 workers and cause it to lose its \$200 million investment in the plant (Kastriner, 1991: 14). Nonetheless, the District Court awarded Polaroid the injunction. Finding that Kodak's infringement had been "willful and deliberate, the court left open the possibility of assessing treble damages, costs and attorney's fees totaling more than \$1 billion against Kodak" (Silverstein, 1991: 306). The CAFC affirmed all aspects of the District Court's decision. As Silverstein points out, "what made American business sit up and take notice... was that the outcome effectively restored to Polaroid a virtual monopoly over the United States market in instant photography" (Silverstein, 1991: 307). The Kodak–Polaroid case was widely regarded as the most striking instance of an increasingly pro-patent sentiment in US courts. The case demonstrated that "a successful patent infringement case can eliminate a competitor from a business, as well as costing the infringer over a billion dollars in damages and related costs," and signaled to businessmen that infringement is "no longer an economically feasible option" (Kastriner, 1991: 15).

The decisively pro-patent trend of the court raises some of the issues of regulatory capture that initial opponents of the CAFC feared. However, the picture is somewhat more complex than simple regulatory capture in so far as the court may well be influenced by broader public policy concerns. The preceding historical discussion has underscored that the development of US IP law has hardly been immune to the broader economic and political climate. Whether it is the courts striking down patent rights in favor of anti-trust objectives, or the Congress retaining mercantilist elements in US copyright law to appease the printing workers' unions, the history of IP protection in the United States is both embedded in and reflects the prevailing climate. With regard to the pro-patent orientation of the CAFC, in the years since its founding there has been

a major reorientation of national competitive policy and increased appreciation of the role of high technology in the nation's economy. These changes can be seen in anti-trust enforcement policy... and in the Supreme Court's new sympathy towards... protection of intellectual

property. Although the Patent Act has not changed dramatically in that time, it should not be surprising that the CAFC has geared its interpretation of the Act to the current climate. (Dreyfuss, 1989: 27)

In short, “the CAFC’s leanings towards patentees may not be so much evidence of capture as recognition of national priorities” (Dreyfuss, 1989: 28, at note 174).