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Against Intellectual Monopoly

By: Michele Boldrin & David K. Levine

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Reviewed by: Susan C. Azzarelli[1]

Relevant Legal and Academic Areas: Intellectual Property; Copyright; Patents; Economics

Summary: This book asks whether patents and copyrights are essential to creation and innovation based on recent controversies in intellectual property. The authors found that a teenager being sued for "pirated" music and the inability of patients in Africa to pay for AIDS medication show that patents and copyrights are not needed. They illustrate that "intellectual monopoly" hinders the competitive free market and the authors agree that patents and copyrights as they exist today should be eliminated.[2]

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[1] Syracuse University College of Law, Juris Doctorate Candidate 2010, Syracuse Science & Technology Law Reporter Executive Editor 2009-2010.

[2] MICHELE BOLDRIN & DAVID K. LEVINE, AGAINST INTELLECTUAL MONOPOLY (Cambridge University Press, 2008).

[3] *Id.*

[4] *Id.*

Chapter One: Introduction

- **Summary**: The authors introduce the ideas of their book by using 16th century inventor James Watt as an example of the ills of the copyright and patent systems. This example leads the authors to their ultimate question: are the patent and copyright systems a "necessary evil we must put up with to enjoy the fruits of invention and creativity," or are they simply "unnecessary evils, relics of an earlier time when governments routinely granted monopolies?"[5] The authors state "both sides agree that 'intellectual property' law needs to strike a balance" between the freedom to use existing ideas and the incentive to create.[6] However, they find patents and copyrights are an unnecessary evil, because property rights can be protected without intellectual property.[7]

- **Discussion**: The chapter begins with the details of James Watt and his patent on the Newcomen steam engine. After securing a patent, and successfully extending it, Watt spent a great "portion of his energy defending the patent from rival inventors with the full force of the legal system."[8] After his patents expired, there was an increase in production, as well as efficiency of engines because the Watt patent had blocked the key innovation necessary to build a better engine.[9] Watt had effectively hindered his own ability to innovate and develop a new engine.[10]

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[5] Boldrin, *supra* note 2, at 3.

[6] *Id*. at 6.

[7] *Id*. at 7.

[8] *Id*. at 1.

[9] *Id.* at 2.

[10] Boldrin, *supra* note 2, at 2.

The authors are generally concerned with the use of the patent and copyright systems as a means of suppressing competition, and stress when "monopoly over ideas is absent, competition is fierce."[11] They found that the monopoly over useful inventions creates intellectual inefficiency because it also blocks the development of other potentially useful inventions.[12] The intellectual monopoly created by copyrights and patent creates a "double-edged sword," with monopolies creating a greater reward for innovators, however, at a higher cost for creation.[13] They find it to be an unnecessary evil because the cost cannot outweigh the social benefit.

Chapter Two: Creation under Competition

- **Summary**: Based on the idea that intellectual monopoly (copyrights and patents) are unnecessary, this chapter illustrates examples of industries and innovations that thrived without intellectual property protection. This includes the software industry, copyrightables (such as books, news and movies), and even the pornography industry.

- **Discussion**: The chapter begins with a look into the software industry, which began with virtually no intellectual property protection for their innovations. Prior to 1981, when the Supreme Court decided *Diamond v. Diehr*, it was not possible to patent software at all.[14] According to Bill Gates, "if people had understood how patents would be granted when most of today's ideas were invented, and had taken out patents, the industry would be at a complete

[11] Boldrin, *supra* note 2, at 10.

[12] *Id.* at 4.

[13] *Id*. at 10-11.

[14] *Id.* at 16.

standstill."[15] The history of the industry would have been much different if innovators had managed to patent and protect things like web browsers.

Innovation and creation can thrive in a competition, something evidenced by open-source software. The software is released under licenses which are a voluntary commitment to operate under free competition, or "copyleft."[16] This technology is commonly used by web browsers. It makes available underlying source code, which enables those who want to freely contribute to add to the code.[17] This allows individuals to benefit from the sharing of the others' innovations, and further those innovations with their own additions. There are also modifications to open-source software which have become profitable systems, despite "pirating" by other programmers. The leading systems are still thriving and the most profitable.[18] This shows that creativity and competition can thrive without intellectual monopoly.

The chapter also considers the competition in the literary, news, music and pornography industries. In fiction and literature, the lack of copyright protection in the 1800s permitted "pirating" of copies of English works by U.S. publishers and was ultimately more profitable for the authors.[19] Currently there is more competition in the right to have the "authorized" copy, as was evidenced by the 9-11 Commission Report. The Report generated revenue even though there were many editions available; the authorized edition was the best seller.[20] In the news

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[15] Boldrin, *supra* note 2, at 16.

[16] *Id.* at 18.

[17] *Id*. at 20.

[18] *Id.* at 22.

[19] *Id.* at 23.

[20] Boldrin, *supra* note 2, at 24-25.

industry, "copyright protects specific words" not the news itself.[21] News trickles down from wire services to local news papers, replicators who cannot have reporters all over the world, but the competition lies in getting the news the fastest. This chapter also uses the pornography industry as model for what the movie industry would look like without copyright protection. While the production and distribution are the same, because there is a lack of protection, the industry has been among the first to exploit new technology and have become one of the most profitable online industries.[22] While monopolies of the industry, like Playboy, are losing market share, small-scale producers are thriving competitively because they are quickly adapting and putting out more diversified products at lower prices.[23]

Chapter Three: Innovation under Competition

- **Summary**: The chapter explores the idea that patents actually tame the innovative force. The authors follow the idea that intellectual property comes into an industry when the innovation has slowed; intellectual property has little role in the early stages of new inventions. The chapter illustrates this through the history of patents, as well as through examples in agriculture, design and sports.

- **Discussion**: In 1623, English Parliament pioneered patent law with the Statute of Monopolies by taking the monopoly power away from the monarchy and strengthening private

[21] Boldrin, *supra* note 2, at 27.

[22] *Id.* at 36-37.

[23] *Id*. at 37-38.

property rights and economic incentive.[24] The statute did not "replace intellectual competition with intellectual monopoly" but made a broad government monopoly into a private monopoly.[25]

France, Germany, Italy and Spain had fairly comprehensive intellectual property laws by the twentieth century, but the United States entered the patent picture in 1790 with the Patent Act. Following the first patent, which was granted for a formula used in soap-making, a new business, industries and inventions have been added and the length of patents continue to grow as courts increasingly favor the patent holder.[26] However, evidence shows patents come after an industry has matured and not because of patent protection.[27]

In the agriculture industry, where innovation centers on plants and animals, incentives to copy and reproduce seeds emerged early on, but changed as the industry grew more powerful.[28] In 1930, the Plant Patent Act was enacted, which allowed patent protection for asexually reproduced plants.[29] The Patent Protection Act was extended in the 70s and again in the late 80s to include products of biotechnology.[30] The extension of patent protection was supposed to benefit the corn production; however, levels of corn production fell following the extension.[31]

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[24] Boldrin, *supra* note 2, at 44.

[25] *Id.*

[26] *Id*. at 45.

[27] *Id*. at 46.

[28] *Id*. at 53.

[29] Boldrin, *supra* note 2, at 53-54.

[30] *Id*. at 54.

[31] *Id.* at 55.

Design patents exist, but, there is still great deal of imitation, even though these patents are "carefully and scrupulously described" in filed patent applications.[32] For example, in fashion design, a newly accepted area entitled to patent and copyright protection, the real innovators are still on top, despite imitation, because their designs get to the wealthiest customers first.[33]

Also, in sports, there is nothing to prohibit professional sports teams from patenting a coach's new play; however, no league has ever done this because "the competitive provision of innovation serves the social purpose."[34]

Chapter Four: The Evil of Intellectual Monopoly

- **Summary**: This chapter focuses on the "intellectual monopoly" of ineffective and costly patents. Monopolies work to move the wealth to the monopolists, most easily accomplished by blocking and stifling innovation, productivity growth. This has led to what the authors call "IP-inefficiency" because monopolists will do everything necessary to retain their profits.

- **Discussion**: Since the late 90s there have been dramatic increases in patents, going up 50% between 1997 and 2000, partly because patents are protecting existing patents.[35] Defensive patents help the monopolies because the threat of a lawsuit is an incentive to pay licensing fees that are cheaper than going to court, even though the patent is not innovative or producing anything beneficial for consumers. These patents also keep out potential new innovators who

[32] Boldrin, *supra* note 2, at 59.

[33] *Id.*

[34] *Id*. at 61.

[35] *Id*. at 72-73.

cannot afford to enter the market and compete. According to the authors, "this is IP-inefficiency at work."[36]

Patents are being used as legal and bargaining tools rather than for actual innovation. The aim is blocking competition; preventing others from producing the same product of better quality, or at a lower price.[37] In the agricultural sector, this has led to acts protecting seed varieties, whose patents are held by U.S. corporations, forcing poor farmers in less developed countries to pay licenses in order to earn a livelihood.[38] Thus, foreign farmers are also supporting U.S. non-farmers.

IP-inefficiency also includes "submarine patents" which is "the filing of a useless patent on a broad idea that might, one day, be useful."[39] This allows the holder to wait until someone else develops the idea, at which time they can charge licensing fees to the actual innovator, who because of fees may not be able to cover his costs of innovations. Because of IP-inefficiency, "patenting is found to be a substitute for research and development, leading to a reduction of innovation."[40]

Chapter Five: The Devil in Disney

- **Summary**: Copyrights can seem less threatening than patents because they are much narrower, and may allow the productions of similar but different works since they only cover the

[36] Boldrin, *supra* note 2, at 75.

[37] *Id.* at 77.

[38] *Id.* at 80.

[39] *Id.* at 84.

[40] *Id*. at 83.

expression of an idea and not an idea itself. However, they are as inefficient because of the extensions on the "limited times" allowed and are economically insufficient.

- **Discussion**: The Sonny Bono/Mickey Mouse Act of 1998 increased the protective time of copyrights on literary work from 50 years beyond the death of the author to 75 years beyond the author's death.[41] However, it has not led to great production of literature[42] proving the point that there is not economic significance in copyrights because there is little benefit to the author. This legislation is more focused on the continued earning of large companies who hold royalties after the author, musician or artist is gone.

Copyright keeps literary and musical works unavailable because large corporations, like Disney, want to keep a few titles protected. To do so the protection has to be extended to all works, essentially holding any protected work hostage because licensing fees are too expensive.[43] The copyright system is also an issue in the music industry. Although the RIAA believes piracy is detrimental to the industry, copyrights are equally as detrimental. Copyrights in music are "not about the incentive to create, innovate, or improve" but are about using payola to get radio air time and keeping monopoly profits high although the actual cost to produce music is low.[44] The benefits of the copyright seem to be much smaller than the means needed to acquire them.

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[41] Boldrin, *supra* note 2, at 99.

[42] *Id*.

[43] *Id*. at 104-05.

[44] *Id.* at 105-07.

Chapter Six: How Competition Works

- **Summary**: Property rights provide incentive to produce, accumulate and trade, but intellectual property creates a monopoly where the holders of intellectual property rights are able to tell individuals what they can do with the holders' property rights. This reduces competition in the market place of ideas.

- **Discussion**: Even without intellectual monopoly, competition would be beneficial for innovators because although the consumer of their idea may be able to copy and reproduce the idea, the idea originally need to be purchased from the innovator.[45] Although the amount collected may be smaller, it is the competitive value of the innovation. Patents and copyrights become unnecessary because it gives a "right to tell other people what they cannot do with the copies they have lawfully purchased."[46]

The idea holds that if people were given ordinary property rights instead of the additional property rights of the intellectual monopoly there would be more ideas and innovation. "Because copies of an idea are always limited . . . they always command a positive price."[47] In this sense it is beneficial to be first, as the authors note "it takes time and money to reverse engineer a product,"[48] but also because it leads to imitation which is socially beneficial when done in respect of the original property rights. Competition in the market of ideas also encourages collaboration because those sharing information may also benefit from those who use

[45] Boldrin, *supra* note 2, at 127.

[46] *Id.* at 128.

[47] *Id*. at 132.

[48] *Id*. at 139.

their knowledge. Therefore, in essence "competitive innovation . . . is the source of all progress.[49]

Chapter Seven: Defenses of Intellectual Monopoly

- **Summary**: Although arguments that favor intellectual monopoly may be logical, they generally do not follow common sense. Things that stand out in these arguments are that things are never equal (monopoly may have more profit, but raises production cost), monopoly is not widely viewed as a friend of innovation, and if it is good it must increase innovation over the competitive system.[50] This chapter considers theories behind the "obvious" and "logical" reasons for arguments in favor of intellectual monopoly.

- **Discussion**: "There is good property—property of land and cars—which leads to competition. And there is bad property—property of ideas—that leads to monopoly."[51] The authors favor the view of owning a copy of an idea, but not the idea itself. They find that, if they were really public goods, it would be something that everyone could make use of without interfering with one another.[52]

Copies are what actually have economic value, and it is those copies that should have all property rights including the owner's legal right to sell them.[53] However, some economists have argued that intellectual monopoly may be the only way to adequately compensate innovators and

[49] Boldrin, *supra* note 2, at 139.

[50] *Id.* at 150-51.

[51] *Id.* at 152.

[52] *Id.* at 154.

[53] *Id*. at 157.

without those protections there is no incentive to create. But this is refuted by the competition theory previously presented, which leads to innovation instead of restricting it.

Another argument for patents is that you must reveal the secret to acquire the patent. However, ideas are generally hard to communicate and resources are limited so the innovative creation will most likely have to be purchased before the secret is revealed.[54] But generally, because the secrets are protected for such a long period of time, the innovation period for imitators will not benefit when secrets are revealed.

The chapter also looks at the Schumpeterian view that monopolies are the highest form of capitalist achievement. This argument holds that "only the monopolists who innovate as fast or faster than potential competitors remain viable,"[55] so there should be a great deal of innovation where there is monopoly. However, because licensing allows monopolies to keep competitors at bay and remain viable although they are not innovating the argument is not persuasive.

Chapter Eight: Does Intellectual Monopoly Increase Innovation?

- **Summary**: This chapter considers whether intellectual monopoly actually leads to a higher rate of innovation. In response, the authors provide evidence that intellectual monopoly cannot lead to a higher rate of innovation than normal property rights for ideas in a competitive market.

- **Discussion**: Although more innovations occur cumulatively and simultaneously with other innovations, intellectual monopoly gives all rewards to those who manage to grab the patent and monopoly first.[56] The introduction of copyrights for classical music in the 1700s is an

[54] Boldrin, *supra* note 2, at 152.

[55] *Id*. at 170.

[56] *Id.* at 208.

example to illustrate intellectual monopoly does not increase innovation. They note that although the amount of composer declined in general, they "declined considerably faster in the United Kingdom after the introduction of copyright"[57] than in other European countries at that time.

The authors also note that it may be difficult to gauge the level of innovation actually going in a country. Measuring the number of patents can be meaningless because not all countries have patent law and the laws may change,[58] as well as the increase of patents that may not actually be for anything innovative. "Patents create a market in patents and in the legal and technical services required to trade and enforce them"[59] which may also make them an inaccurate factor of innovation levels.

There seems to be more beneficial results in a competitive market of ideas. In software development, Silicon Valley required continuous and competitive innovation, which also led to cooperation among firms.[60] With higher cooperation and the sharing of knowledge, there can be greater innovation because innovators can build on other ideas. Cooperation could also diminish the rush to acquire broad protection to avoid "simultaneous discovery," where a fellow inventor develops the same idea.[61]

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[57] Boldrin, *supra* note 2, at 188.

[58] *Id.* at 190.

[59] *Id*. at 192.

[60] *Id.* at 200.

[61] *Id*. at 202.

Chapter Nine: The Pharmaceutical Industry

- **Summary**: The pharmaceutical industry is often used as the best example of the need for patents. Although the industry seems to fit the competitive model, with innovation as the main competitive edge and large fixed costs, pharmaceutical patents are still only good for monopolists and not society.

- **Discussion**: The U.S. has always allowed the patenting of drugs, both for the process to produce and for the chemical formula.[62] However until recently, many European countries only allowed the patenting of the process to make a new drug. "There is negative social value in patenting a specific product, as this would exclude all others from producing it, even though different processes."[63] Even though the European Union has similar laws similar to the US today, if the monopolies were really necessary the previous differences would have has a large "impact on the national pharmaceutical industries,"[64] and this is not the case.

Prior to pharmaceuticals, the major form of patent protection was for chemical production of paints and dyes, which were generally held in German and French corporations, slowing any growth in the industry in the U.S. until after the world wars when the patents and plants were confiscated.[65] Today, because there have been so many mergers among large pharmaceutical companies, they have become accustomed to operating like a monopoly, and the

[62] Boldrin, *supra* note 2, at 215.

[63] *Id.* at 216.

[64] *Id.* at 218.

[65] *Id.* at 219-21.

patents are not helpful to innovation. They produce "too much expense of the wrong kind"[66] without producing enough social good.

Chapter Ten: The Bad, the Good, and the Ugly

- **Summary**: In their closing chapter, the authors look at the different proposals for the system of intellectual property.

- **Discussion**: "A realistic view of intellectual monopoly is that it is a disease rather than a cure," and "cutting it all out at once might not be a good idea."[67] There are many ideas and proposals which would strengthen intellectual monopoly and produce an intellectual property system that would be worse than the current state. Some of the ideas which should be rejected include: extending patents to include sports moves, news clips or press releases; extending the level of protection to databases; extending protection of scientific research; extending European patents to match the U.S.; imposing legal restrictions on the design of computers; and allowing patenting of any plant variety outside the U.S.[68]

The worst possibility, leading to more stalled innovation and monopoly control, would be to "Stay the Course" or "Do Nothing."[69] Instead, gradual reform is necessary,[70] with the ultimate goal to be the elimination of the patent and copyright system. Important improvements would prevent losing more public domain by allowing patents to be freely available and challenged

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[66] Boldrin, *supra* note 2, at 238.

[67] *Id*. at 244.

[68] *Id*. at 246-47.

[69] *Id.* at 264.

[70] *Id.* at 245.

before they are granted.[71] Deregulation should be encouraged, leading to the eventual abolition of the system as a whole, because the markets can function, and function well, without intellectual monopoly.

[71] Boldrin, *supra* note 2, at 248-49.