

MRS. ARONSON'S PATENT

GENDER, FAMILY AND EVERYDAY INNOVATION IN POST-WAR AMERICA

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ABSTRACT

This essay explores the curious and hitherto unexplored history of Aronson v. Quick Point Pencil Co. (U.S. 1979). Though the case occupies an important niche in the jurisprudence of patent misuse and preemption, its history illuminates broader issues surrounding innovation policy that are increasingly relevant today. First, Aronson tells a story of “everyday” innovation – common sense ingenuity that emerges far from university laboratories and Silicon Valley startups. In this respect, the story is an inspirational one: anyone with a bright idea and a little bit of gumption can become an inventor. Even better: the legal system is there, in the form of patents, to help them transact on an equal footing with corporate entities. But Aronson also highlights the very real gender disparities that continue to burden the innovation economy. This account thus joins other recent expositions of the prejudices and hurdles faced by mid-twentieth century American women in the sciences and engineering. Like these accounts, Aronson shows that women inventors were at a serious disadvantage compared to their male counterparts -- not only when dealing with governmental agencies, but also within the social structures imposed by their familial relationships. Relying on personal interviews and extensive archival research, this essay explores both the history and implications of Aronson. In doing so, it sheds light both on the practice of everyday innovation in America during the middle of the twentieth century and the challenges faced by women in that setting. Its historical insights support efforts aimed at addressing these persistent issues today. And beneath all this lies a mystery surrounding the Aronson patent application itself: what did it cover, why did it go missing, and why was it really rejected?

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INTRODUCTION

The title of this essay is deliberately provocative. It is also misleading in two major respects. First, there is no “Mrs. Aronson”, at least not in this story. When Chief Justice Burger wrote for a unanimous Supreme Court in 1979 that “the petitioner, Mrs. Jane Aronson, filed an application ... for a patent on a new form of keyholder”,¹ he referred to the petitioner before him as *Mrs. Aronson*, even though her surname at the time was Hossfeld. And at the time she filed her patent application a quarter century earlier, the named female applicant was married to Norbert Leopoldi and used his surname, even though, for reasons discussed below, she filed the application under her “maiden” name Aronson. The second falsehood buried in the title of this essay concerns Jane Aronson’s patent, which also never existed. As many students of patent law know, Jane Aronson’s patent application was ultimately rejected by the Patent Office and the Patent Board of Appeals. She never obtained a patent on her novel key holder design, though, as the narrative that follows will show, she may have been entitled to one.

This essay unearths the curious and hitherto unexplored history of the case *Aronson v. Quick Point Pencil*. Though the case occupies an important niche in the jurisprudence of patent misuse and federal-state preemption, its history illuminates broader issues surrounding innovation policy that are increasingly relevant today. First, *Aronson* tells a story of “everyday” innovation – common sense ingenuity that bubbles up far from the confines of university laboratories and Silicon Valley startups. In this respect, the story is an inspirational one: anyone with a bright idea and a little bit of gumption can become an inventor. Even better: the legal system is there to help everyday inventors transact on an equal footing with much larger corporate entities. As such, *Aronson* can be viewed as a case study in the growing literature of user innovation pioneered by scholars such as Eric von Hippel,² Katherine Strandburg,³ William Fisher⁴ and Jessica Silbey.⁵

But *Aronson* also has a less congenial side: it casts light on the very real gender disparities that have burdened, and continue to burden, the innovation economy. This account thus joins other recent expositions of the hurdles faced by mid-twentieth century American women in the sciences and engineering professions.⁶ Like these prior accounts, *Aronson* shows that women inventors were at a serious disadvantage compared to their male counterparts -- not only when dealing with governmental agencies such as the Patent Office, but also within the social structures imposed by their familial relationships. But Jane Aronson,⁷ unlike the women featured in these better-known histories, did not advance

¹ *Aronson v. Quick Point Pencil Co.*, 440 U.S. 257 (1979).

² Eric von Hippel, *Democratizing Innovation* (2005).

³ Katherine Strandburg, *Users as Innovators: Implications for Patent Doctrine*, 79 COLO. L. REV. 467 (2008).

⁴ William W. Fisher III, *The Implications for Law of User Innovation*, 94 MINN. L. REV. 1417 (2010).

⁵ Jessica Silbey, *The Eureka Myth: Creators, Innovators, and Everyday Intellectual Property* (2015).

⁶ See, e.g., Richard Rhodes’s *Hedy’s Folly*, Catherine Musemeche’s *Lethal Tides*, Nathalia Holt’s *Rise of the Rocket Girls*, Kathryn Kleiman’s *Proving Ground*, and Margot Lee Shetterly’s surprise #1 *New York Times* bestseller, *Hidden Figures*.

⁷ I refer in this article to the principal characters, Jane Aronson/Leopoldi/Hossfeld and Norbert Leopoldi by their given names, Jane and Norbert, solely for the sake of narrative clarity.

rocket dynamics, radio communication, computer programming or naval science. Her innovation was a simple and inexpensive household article that is still widely in use today: a keyring designed not to break a woman's fingernails. Her patent was never granted, but her ex-husband's, claiming virtually the same invention, was.

Based on personal interviews and extensive archival research, this essay explores both the history and implications of *Aronson v. Quick Point Pencil*. In doing so, it illuminates both the practice of everyday innovation in America during the mid-twentieth century and the challenges faced by women inventors in that setting. As such, it offers insight that may support efforts aimed at addressing these persistent issues today.

I. ARONSON V. QUICK POINT PENCIL: THE CASE

Today, *Aronson v. Quick Point Pencil* is a staple of intellectual property law casebooks and treatises.⁸ It is usually discussed in connection with the doctrines of patent misuse – the principle that a patent owner may not seek to expand the scope of its exclusive rights beyond the four corners of the patent – and federal patent law preemption of state contract law. Patent misuse renders a patent unenforceable. This doctrine and its drastic remedy are often invoked when a patent holder has sought to collect royalties after the expiration of its patent, as in the seminal case *Brulotte v. Thys*.⁹ In *Aronson*, the facts present an interesting twist on this standard scenario. In the case, the patent holder, Aronson, entered into a licensing agreement whereby Quick Point agreed to pay her a royalty of 5% of its net sales of keyrings made according to the design of her then-pending patent application. According to the agreement, if a patent did not issue within five years, the royalty rate would drop to 2.5%.

After five years, no patent had issued, and Quick Point reduced its royalties accordingly. It remitted royalties on keyring sales at the reduced rate for nearly two decades, paying Jane more than \$200,000 through September, 1975. But then Quick Point apparently had second thoughts, wondering why it continued to pay at all, given that Jane held no patent (and even if she had obtained a patent, it would have expired by then). As a result, Quick Point stopped paying. But Jane Aronson, or more likely her ex-husband (see Section x below), would not accept this cessation of payment and brought suit for breach of contract. Quick Point raised the misuse doctrine in its defense, arguing that even if Aronson had received her patent, Quick Point would no longer have to pay a royalty once it had expired, so surely with *no* patent at all, its payment obligation must also cease. Despite being represented by the eminent Erwin Griswold, former Solicitor General of the United States and Dean of Harvard Law School, Quick Point lost at the Supreme Court. In an opinion authored by Chief Justice Burger, the Court held that, without an issued patent,

⁸ See, e.g., Jorge L. Contreras, *Intellectual Property Licensing and Transactions: Theory and Practice* 805-07 (2022), Jeanne C. Fromer & Christopher Jon Sprigman, *Copyright Law: Cases and Materials* 676-77 (3rd ed. 2021); Raymond T. Nimmer, *Licensing of Intellectual Property and Other Information Assets* 680 (2nd ed. 2007).

⁹ 379 U.S. 29 (1965) (owner of a patent on a hop picking machine charged users of the machine royalties for a fixed 17-year period, which in many cases extended after the patent had expired).

patent law and the patent misuse doctrine played no part in the case. A contract is a contract, and Quick Point had legitimately agreed to pay 2.5% indefinitely.¹⁰ This is where the narrative of *Aronson v. Quick Point Pencil* usually ends. But, as is often the case, there is more to the story.

II. DRAMATIS PERSONAE

A. Jane Aronson

Jane Doris Aronson was born on April 15, 1926, in Chicago, Illinois to Sidney Mortimer Aronson, a native of Chicago, and Tugela Prins, of Johannesburg, South Africa. Sidney's father, Julius W. Aronson, was a native of New York, New York, but had moved his family to Chicago by 1910. By the time of Jane's birth, the Aronsons, who owned a printing business, were financially secure, if not wealthy. They were prominent members of the North Chicago Jewish community and played a role in supporting the historically significant Temple Sholom on Lake Shore Drive.¹¹

Jane graduated in 1943 from Lake View High School in Chicago at the age of seventeen. According to her yearbook profile, Jane participated, among other things, in drama, public speaking, the English and French clubs, the yearbook literary staff and the Red Cross.¹² Jane had an interest in, and an aptitude for, the visual arts. Her daughter recalls that Jane painted and drew, often depicting scenes from the Roaring Twenties with flappers in elaborate hats pictured with sleek greyhounds and luxury cars.¹³ After high school, Jane attended classes at the Art Institute of Chicago. Yet she never completed a degree in art. In 1949, at the age of 23, Jane married a charming Austrian immigrant, Norbert Leopoldi, who was then 37 years old.

¹⁰ The holding of *Aronson* echoes that of an earlier district court case involving a perpetual obligation to pay royalties on the unpatented formulation for the oral antiseptic marketed as Listerine. *Warner-Lambert Pharm. Co. v. John J. Reynolds, Inc.* 178 F. Supp. 655 (S.D.N.Y. 1959). See CONTRERAS, LICENSING, *supra* note 8, at 366-72 (discussing Listerine case).

¹¹ Temple Sholom was founded in 1867, shortly after the Civil War, by leading members of the Reform Jewish movement. Temple Sholom, A New World. A New City. A New Synagogue. <https://www.sholomchicago.org/history>

¹² Lake View High School Red and White 128 (1943).

¹³ Interview with Subject 3.



Figure 1 - Jane Aronson (c. 1949) (ancestry.com)

B. Norbert Leopold

Norbert Leopoldi's grandfather, Leopold Kohn, was a pianist who accompanied singers in Vienna coffee houses under the stage name "Leopoldi", which he adopted to "conceal[] the unmistakable Jewishness of the name Kohn".¹⁴ Leopold's son Hermann, who was also a musician, officially changed his surname from Kohn to Leopoldi in 1911.¹⁵ Norbert was born the next year with the surname Leopoldi.

Hermann Leopoldi enjoyed a successful musical career in Vienna as a pianist, composer and cabaret owner.¹⁶ As such, Norbert was raised in relative comfort within the affluent Viennese Jewish community. He was a precocious boy with an inquisitive mind who enjoyed playing chess and tinkering with household items.¹⁷ As the situation for Jews in Vienna became increasingly tense during the late 1920s, Norbert's maternal

¹⁴ Georg Traska & Christoph Lind, *Hermann Leopoldi: The Life of a Viennese Piano Humorist* 15 (Eng. trans. Dennis McCort, 2013).

¹⁵ Felix Czeike, *Historisches Lexikon Wien* in 5 Bänden. Part IV p. 32 (1995).

¹⁶ TRASKA & LIND, *supra* note 14, at 99.

¹⁷ Though he never achieved master status, Norbert maintained a love of chess throughout his life. The culmination of that avocation came in 1963 when, as president of the Chicago Chess Club, Norbert had the opportunity to play chess Grandmaster Bobby Fischer. As one Fischer biographer recounts, "the night before the final round [of the Western Open at Bay City, Michigan], Fischer played a bout of five-minute chess with Norbert Leopoldi, a Chicago advertising man known as a strong midwest player. Word swept through the tournament hall that Fischer had won \$250. The next morning, after playing all night without sleep, the figure had risen to \$3500 ... Out of hundreds of games played, Leopoldi managed to win three games." FRANK BRADY, *BOBBY FISHER: PROFILE OF A PRODIGY* 70 (revised ed. 1989).

grandparents, Hugo and Amalie Kraus, emigrated to the United States in 1930.¹⁸ Norbert, then 18, accompanied them, traveling third class aboard the *S.S. George Washington*,¹⁹ and getting his first view of America. Norbert soon returned to Vienna, however, where he accompanied his father on musical tours and engagements.²⁰

But by 1938, the local situation had become perilous. In May, Norbert, then 26, left Vienna for Belgium, where he made his way to Rotterdam and bought passage for New York, listing as his occupation “dramaturge”.²¹ He arrived in New York in July and took up residence with his grandparents, who were by then American citizens operating a hardware store in Brooklyn.²²

At the outbreak of World War II, Norbert enlisted in the U.S. Army and then the Merchant Marine,²³ where his natural intuition for mechanical devices landed him in the engine room of the 7,100 ton cargo ship *Stephen W. Kearny*. During one Atlantic crossing, Norbert is reported to have rigged an electric drill to the ship cook’s meat grinder, thereby automating the process and securing the best rations of the voyage.²⁴ After his tour of duty, Norbert moved to Chicago. There, through common acquaintances in the Jewish community, he met Jane Aronson and the two were married in 1949.

At first, the newlyweds lived with Jane’s parents and older brother. In the 1950 U.S. Census, Norbert stated his occupation as “salesman” for an advertising agency, the same agency where Jane worked as a typist.²⁵

¹⁸ TRASKA & LIND, *supra* note 14, at 226 n. 4.

¹⁹ U.S. Dept. Labor, List or Manifest of Alien Passengers, *S.S. George Washington*, Sailing from Hamburg, Nov. 25, 1930.

²⁰ TRASKA & LIND, *supra* note 14, at 169.

²¹ U.S. Dept. Labor, List or Manifest of Alien Passengers, *S.S. Volendam*, Passengers sailing from Rotterdam, June 25th, 1938.

²² Less sanguine is the story of Norbert’s father. The day after Norbert’s departure for Belgium, Herman Leopoldi was arrested by the Gestapo on charges of performing seditious musical pieces. TRASKA & LIND, *supra* note 14, at 214-15. He was transported to the Dachau concentration camp outside of Munich, where he stayed for four months, after which he was transferred to the Buchenwald camp. There, by a rare stroke of good fortune, the camp’s deputy commandant was a music lover who regularly forced the prisoners to sing songs for his entertainment. One day this officer, tiring of traditional folk songs, ordered the prisoners to write a song about Buchenwald itself. Herman Leopoldi’s entry in this song competition was the winner and became known as the “Buchenwald March”. *Id.* at 218-22. Through the intervention of Herman’s wife Eugenie, he was released in February 1939. Shortly thereafter he emigrated to America, where he enjoyed a successful career on the musical stage, finally returning to Vienna in 1947.

²³ Regina Leopoldi, *Chess Tidbits*, Illinois Chess Bull., May-June 1993, at 15.

²⁴ Interview with Subject I, Dec. 11, 2021.

²⁵ U.S. Dept. of Commerce, Bureau of the Census, 1950 Census of Population and Housing, Illinois, Cook County, Chicago, No. 103-4786, Sheet 11 (Apr. 11, 1950) (accessed via Familysearch.org).



Figure 2 - Norbert and Jane (with unidentified woman, right) (c. 1952)

C. The Specialty Advertising Industry and Quick Point Pencil

During the last decades of the late nineteenth century, American firms discovered that they could effectively promote their businesses by giving prospective customers inexpensive products (“premiums” or “specialties”) that bore their logos or other identifying features.²⁶ Specialty advertising firms design and sell premiums in bulk to clients such as auto dealerships, home contractors, real estate agents, medical practices, and a wide range of retail businesses. These businesses in turn give these premiums away at retail outlets, sporting events, festivals and in medical waiting rooms.

The early twentieth century marketing entrepreneur Henry S. Bunting referred to this practice as “specialty advertising” and cataloged examples of premiums ranging from the anodyne (e.g., calendars, baseball caps, and ashtrays) to the bizarre (e.g., pickle-shaped watch fobs, pigskin purses, and bars of soap).²⁷ Today, premiums including water bottles, thermos cups, notebooks, highlighters and (still) baseball caps are favorite giveaways of law firms and law schools, not to mention bar prep courses and legal database vendors.

Wendy Woloson identifies the commercial reasoning behind specialty advertising, describing it as “[a]n important and powerful form of commercial currency, helping businesses establish seemingly intimate relationships with their customers as they curried favor, cemented brand loyalty, and made consumers feel appreciated and affirmed.”²⁸ Woloson reports that by the 1950s American firms were giving away specialty goods valued at between \$500 million and \$700 million per year.²⁹

²⁶ See Wendy A. Woloson, *Crap: A History of Cheap Stuff in America* 146-66 (2020); Henry S. Bunting, *Specialty Advertising: The New Way to Build Business* 1 (2nd ed. 1914, originally published 1910).

²⁷ BUNTING, *supra* note 26, at 5-13.

²⁸ WOLOSON, *supra* note 26, at 147.

²⁹ WOLOSON, *supra* note 26, at 161. In 2023 dollars, this is equivalent to a range of \$6.2 billion to \$8.7 billion (<https://www.usinflationcalculator.com>).

One such specialty firm was the Quick Point Pencil Company of St. Louis, Missouri. Quick Point's founder, Gerald August Goessling (1900-1968) was a "wild eyed" serial entrepreneur who began his career manufacturing handheld cigarette lighters under the name Missouri Gas Lighter Company.³⁰ He soon expanded his business to other companies including Missouri Knife Co. and St. Louis Plastic Molding.



*Figure 3 – celluloid automatic pencil manufactured by Quick Point for Golden West Peanut Butter (1930s)
(etsy.com)*

Goessling founded the Quick Point Pencil Company in 1928 to manufacture mechanical pencils using celluloid (see Figure 3), a new plastic material that was inexpensive and versatile, but also inflammable. Quick Point's first factory, located in the 500 block of Olive Street in St. Louis, reportedly caught fire once per week, and stayed in business only because it was conveniently located next to a fire station. Despite these setbacks, Quick Point thrived, and during the 1930s Goessling obtained a number of patents relating to mechanical pencil design and manufacture,³¹ as well as methods and equipment for printing on cylindrical tubes.³² This last set of innovations enabled Quick Point effectively to imprint corporate names, logos and slogans on plastic mechanical pencils (see Figure 3) and thereby to establish itself as a leading specialty advertising firm.

Goessling soon expanded Quick Point's burgeoning business to include a wide range of specialty advertising products including combs, shot glasses, golf balls, mugs, flashlights and key holders, all emblazoned with client names, logos and slogans. Key holders were particularly interesting to Goessling, who obtained a patent in 1935 for a novel "key container", the outer surface of which could be printed with advertising copy (see Appendix A).³³

³⁰ Interview with Subject 4 (Feb. 21, 2022).

³¹ U.S. Pat. No. 2,183,350 "Pencil Bushing and Clip" (Dec. 12, 1939), U.S. Pat. No. 2,353,457 "Synthetic Pearl Resin" (Jul. 11, 1944). *See also* U.S. Pat. No. 2,852,397 "Non-Solid Erasable Writing Medium and Instrument Utilizing Same" (Sep. 16, 1958) (claiming a novel erasable ink).

³² U.S. Pat. No. 2,016,425 "Printing Tubular Celluloid Articles" (Oct. 8, 1935); U.S. Pat. 2,133,920 "Controlling Size of Printed Impressions on Cylindrical Surfaces" (Oct. 18, 1938)

³³ U.S. Pat. No. 1,999,290 "Key Container" (Apr. 30, 1935).

D. Americans in Paris

Before the bulk of the world's merchandise could be viewed online, those wishing to explore the latest product offerings and designs from a range of vendors attended trade shows. These large-scale events brought together hundreds or thousands of vendors and potential customers. During the mid-twentieth century, one of the largest and most prominent of these annual events was the Paris International Trade Fair (commonly known as the *Foire de Paris* or the Paris Fair). The Paris Fair, which has been held most years since 1904, occupies over 100 acres of display space in ten buildings at the Porte de Versailles outside of Paris. In 1954 the Fair hosted more than 12,500 exhibitions and attracted approximately four million attendees from around the world.³⁴

After the War, Norbert Leopoldi worked as an independent sales representative for specialty advertising firms, offering to create a wide range of premiums for consumer-facing businesses. Around 1954, Norbert formed his own specialty advertising firm, Leopoldi Advertising Gift Specialties, for which he registered a federal trademark.³⁵ One of his offerings was a plastic pillbox designed to display the name of a medical practice or pharmacy.³⁶

As part of his business, Norbert attended trade shows looking for inexpensive products that could readily be imprinted with businesses' brands and logos. Many of these shows were in Europe, and Norbert's family recalls his trips to cities such as Frankfurt, Hannover, Basel and Vienna for this purpose.

In 1955, Norbert brought Jane on one of these trips; it was likely her first trip abroad. He was 43 and she, traveling under the name Jane Leopoldi, was 29. Among other things, they brought hard-to-find consumer products such as women's hosiery to Norbert's relatives in Austria. In addition, it is likely that Jane and Norbert attended the Paris Fair, held from May 14-30 of that year.

In addition to sightseeing, while in Europe Jane applied for a German patent. On May 13, 1955, a German patent application for a novel sponge design was filed in the name of Jane Leopoldi.³⁷ The claimed sponge could be tightly compressed and wrapped in water-soluble plastic. Upon immersion, the plastic wrapper would dissolve the sponge would grow to its full size. In both the compressed and expanded forms, the sponge could be printed with advertising text and images, and easily shipped in compressed form as a promotional item. This invention, though listing Jane as the inventor, clearly related to Norbert's growing specialty advertising business.

³⁴ U.S. Dept. Commerce, Bur. Foreign Commerce, World Trade Info. Svc., Part 5, Fairs and Exhibitions – International Trade Fairs and Exhibitions in France 1-2 (Jan. 1955).

³⁵ U.S. Trademark No. 594,731.

³⁶ Interview with Subject 2. Photograph on file with the author.

³⁷ German Pat. No. 1,707,277U “Schwamm” (Sep. 22, 1959).

The couple departed France in August, traveling first class aboard the *SS Liberte*, and arriving in New York less than one week later.³⁸ With the sponge patent application awaiting review in Germany, it is likely that one of the couple's topics of discussion during the voyage home was keyrings.

III. THE INVENTION

A. *History of the Humble Keyring*

Locks and keys have been known since the advent of metalworking and have been discovered among the remains of ancient civilizations from Egypt to Mesopotamia to Rome.³⁹ As metal keys increased in popularity, the need to hold them together in a safe and reliable manner gave rise to the keychain or keyring. The first keyrings appear to have been simple bands or cords used to hold keys together while keeping them easily accessible for use. Figure 4 shows an example of this practical device, with keys still attached, found at a Gallo-Roman archeological site.



Figure 4 - Gallo-Roman keyring with three keys, bronze, 1st - 5th cen. CE (Musée de Centenaire, Brussels, Belgium)

By the Middle Ages, keyrings had become common accessories of household life, at least among those who owned something worth locking up, whether coin, jewelry, merchandise or prisoners (see Figure 5).

³⁸ U.S. Treas. Dept., List of In-Bound Passengers (United States Citizens and Nationals) on French S/S 'LIBERTE' arriving at Port of New York N.Y. Sept. 2nd, 1955.

³⁹ See, generally, Augustus Henry Lane-Fox Pitt-Rivers, *On the Development and Distribution of Primitive Locks and Keys* (1883); John Gelder, *Ancient Doors: Written Documentation from Mesopotamia, Egypt, Greece and Rome* in *Water, Doors and Buildings: Studies in the History of Construction* (James Campbell et al., eds., 2019).



Figure 5 - *Ishrael van Meckenem (c. 1440 - 1503), detail from Couple Seated on a Bed showing a large waist-worn keyring with five keys (Metropolitan Museum, New York, USA)*

By the nineteenth century, keyrings expanded beyond their purely utilitarian functions to become decorative objects. As inexpensive and easily manufactured items, they were sold as souvenirs, along with other inexpensive trinkets such as statuettes, magnets and miniature spoons, to the growing numbers of travelers visiting foreign locales.⁴⁰ The rise of plastics manufacturing after World War II led to an explosion in the production of cheap consumer goods, and by the 1950s large numbers of plastic products, many manufactured in Japan, were available on the American market.⁴¹ The cheap souvenir keyring was a major beneficiary of improved plastics technology, making it, according to some sources, one of the most popular tourist souvenirs in the world.⁴² An iconic example of the souvenir keyring includes a fob depicting the Eiffel Tower (see Figure 6).

⁴⁰ See Danielle M. Lasusa, *Eiffel Tower Key Chains and Other Pieces of Reality: The Philosophy of Souvenirs*, 38 *PHIL. FORUM* 271 (2007).

⁴¹ See Jeffrey L. Meikle, *American Plastic: A Cultural History 187-92* (1997); Sebastian Conran, *Deplastification?* In *Provocative Plastics: Their Value in Design and Material Culture* 89, 90 (Susan Lambert, ed., 2020).

⁴² Rolf Potts, *Souvenir* (2018).

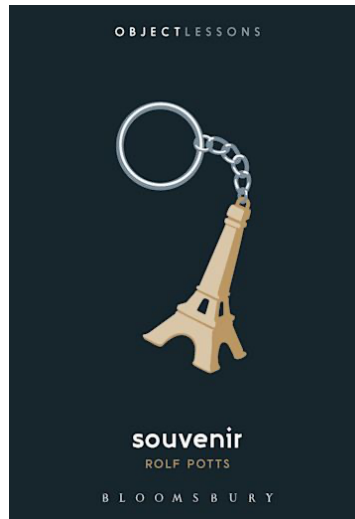


Figure 6 - The cover of Rolf Potts's book *Souvenir*, depicting an iconic Eifel Tower keychain (Bloomsbury Press, 2018)

B. Anatomy of a Keyring

A keyring, also commonly known as a keychain, typically consists of three principal parts: the ring or clasp, the chain and the fob or trinket (see Figure 6).⁴³

The ring holds the keys. It is typically a circular metal loop that is bent into a form known as a split ring or cotter ring. In this configuration, the ends of the loop overlap so that one end must be pried a few millimeters away from the other to allow the aperture of a key to be slid between the overlapping segments of the ring until it reaches a point where the segments snap shut and thereby secure the key on the ring.⁴⁴ This basic design can be observed even in ancient examples of bronze keyrings (see Figure 4). Today, the ring is usually made of a rigid, durable metal such as electroplated iron or nickel, though sterling silver and other metals may also be used.

The fob or trinket is an item, other than a key, that is attached to the keyring. Fobs can be purely ornamental, like the Eifel Tower shown in Figure 6, they can embody a corporate logo or advertisement,⁴⁵ or they can be useful implements such as bottle openers, whistles or memory sticks. Fobs can be made from wide range of materials including plastic, metal, wood and leather.⁴⁶

The chain simply connects the fob to the ring. It is usually made of small, interlocked metal links, though many other materials and configurations are possible.

⁴³ See, generally, Alyssa Mertes, What Are Keychains Made Of and How Are They Created? Jan. 17, 2023, <https://www.qualitylogoproducts.com/blog/how-are-keychains-made/>

⁴⁴ See WikiHow, How to Add a Key to a Key Ring, <https://www.wikihow.com/Add-a-Key-to-a-Key-Ring> (visited Mar. 17, 2023).

⁴⁵ See Section x, *infra* (discussing specialty advertising).

⁴⁶ See, generally, Mertes, *supra* note 43.

The only essential element of a keyring is the ring itself, which is necessary to hold the keys together. The fob and chain, while found in many keyrings, are not essential to the function of the device and serve a largely ornamental purpose (though some fobs can be useful items, as noted above).

C. Patents and Keyring Innovation

Though the basic design of the keyring – a closed loop for keeping keys together – has existed since antiquity, innumerable improvements to this basic design have been developed over the years. Many of these have been patented. Appendix A lists patents covering keyring designs and improvements that were issued in the United States prior to the end of 1955, the year in which Jane Aronson filed her own keyring patent application.

As shown in the Appendix, a slightly improved version of the basic annular ring design with overlapping ends dates to 1909. Many of the other improvements to the ring design include increasingly complex mechanisms for opening and closing the metallic clasp without the need to pry apart its overlapping ends. Based on this multiplicity of designs, it seems clear that a consistent desire of keyring users was a ring that could be opened easily and without damage to one's fingers or, more importantly, fingernails. While mechanical opening and closing devices could achieve this purpose, they are both relatively expensive (compared to a simple annular ring) and prone to breakage. The ideal keyring would be (a) inexpensively cast from a single piece of metal, (b) capable of securing a reasonable number of keys, and (c) amenable to the addition or removal of keys without undue physical effort or injury.

D. The Aronson Keyring

It is not known when Jane and Norbert began to think about keyrings, but family lore tells us that it was in Paris that they arrived at the novel design that I will refer to as the Aronson keyring. The design satisfied each of the criteria noted above. It encompassed two pieces: a springy metallic wire bent so that its ends would fit snugly into a groove in a plastic disc. Some force is required to remove the wire from the disc, so that when the wire and disc are coupled, any keys threaded through the wire are secured (Figure 7).

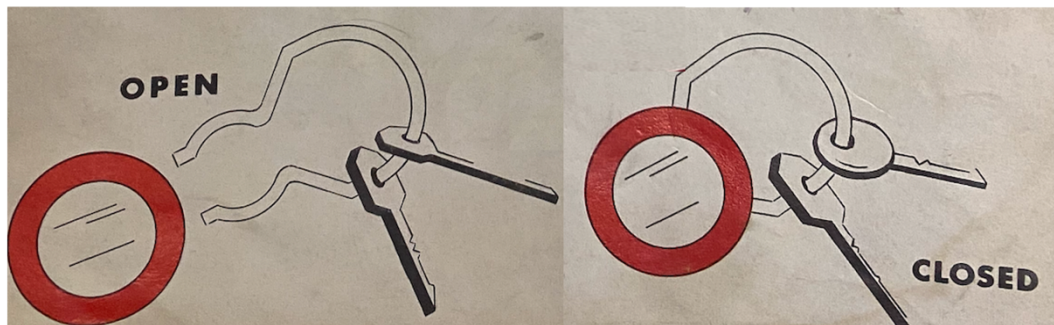


Figure 7 - Design for Aronson keyring from Quick Point Pencil sales brochure, 1955 (photo by the author, courtesy of Quick Point Corp.)

Because the wire and disc can be pulled apart with minimal force, and the opening between the ends of the wire is relatively large, the operation of the keyring is far easier and less damaging to the user's fingernails than the traditional overlapping ring design. Likewise, because the Aronson keyring does not include mechanical hinges or other moving parts, it is less likely to fail, and more inexpensive, than hinged keyrings.

Moreover, the plastic disc in the Aronson keyring can either be imprinted directly with advertising copy, or it can include a transparent plastic cover under which a printed (paper) advertisement or logo can be inserted (Figure 8).



Figure 8 - Sample board containing Aronson keyrings, c. 1955 (photo by the author, courtesy of Quick Point Corp.)

There are conflicting accounts of who “invented” the new keyring. Jane’s daughter says that her mother, a naturally curious and creative person, invented the fingernail-friendly device, which she also thought would help users with arthritis.⁴⁷ Norbert’s daughter says that he was the one who improved on the design of a keyring that Jane found while in Paris.⁴⁸ The truth is likely some blend of these accounts. Jane may have been inspired by the many product offerings at the Paris Fair, including scads of souvenir keyrings, each more difficult than the last to pry apart, while Norbert may have seen the potential to include specialty advertising on keyrings made according to the new design.

IV. THE APPLICATION

A. Filing

Whoever actually conceived the new keyring idea, Jane and Norbert got to work shortly after returning to the U.S. from France in early September, 1955. Norbert regularly worked with a tool maker who prototyped new product designs for him. With a prototype in hand, they engaged a patent attorney⁴⁹ who filed a patent application claiming the Aronson keyring on October 25, 1955.⁵⁰ Jane was 29 years old.

The application listed Jane as the sole inventor. There are several possible reasons that the application reflects only Jane’s inventorship. First, she may actually have been the sole inventor of the keyring design, and Norbert, being an honorable man, insisted that she be listed as the inventor. It is also possible that the patent attorney, determining that Jane invented the keyring, appropriately listed her as the sole inventor. Another possibility is that Jane and Norbert jointly contributed to the invention, yet only Jane was listed as the inventor for strategic reasons.

Norbert’s daughter recalls that Norbert caused Jane to be listed as the inventor of the keyring to shield the patent from creditors in case he was ever required to file for bankruptcy.⁵¹ Fear of bankruptcy would not have been out of character for the proprietor of a new advertising business in the Chicago, a large city already crowded with advertising firms and agencies. The asset concealment theory is also supported by the fact that the keyring application uses Jane’s “maiden” name, Aronson, rather than her married name, Leopoldi (which she used on her German sponge patent application just a few months earlier). If Norbert were trying to shield assets from the reach (and knowledge) of creditors,

⁴⁷ Interview with Subject 3 (Jun. 9, 2022).

⁴⁸ Interview with Subject 1 (Dec. 11, 2021).

⁴⁹ Given the loss of Jane’s patent application files, the patent firm that Jane used to prepare and file her application is not known. However, a tantalizing lead arises from the following: a certain Martin Aronson of New York, NY, was the inventor of a novel display rack for belts, for which he filed a design patent application on April 5, 1954 (the patent was issued on November 16 of the same year as DES 173,469), represented by patent attorney John P. Chandler. If Martin Aronson were a relation of Jane’s (acknowledging that Aronson is not an uncommon surname), then perhaps Jane and Norbert, arriving in New York in the fall of 1955, consulted with Martin Aronson and obtained a referral to his attorney.

⁵⁰ U.S. Patent App. 03/542,677 (filed Oct. 25, 1955).

⁵¹ Interview with Subject 1 (Aug. 21, 2021).

then filing under Jane's maiden name would have been logical,⁵² though reflecting somewhat questionable ethical standards.

This being said, Norbert was not shy about filing patents and listing himself as the inventor. During his lifetime, he was identified as the inventor on 60 issued U.S. patents. Several of these listed co-inventors such as William Heinrich, a prototyping engineer with whom Norbert worked regularly. One 1992 patent for a belt design lists Norbert and his second wife, Regine, as co-inventors.⁵³ Yet Norbert alone is listed as the inventor on 44 different patents, including one (for a squeegee with attached fluid bottle) that was filed in 1957, less than two years after the keyring application. Most of these patents were assigned to Norbert or one of his own companies (including a one named "Nordette Inc.", the assignee of the squeegee patent).

All of this means that if Norbert were pursuing a strategy of asset concealment in 1955, he had abandoned that strategy by 1957, if not earlier. The implication of this is simply that Jane may actually have been the inventor of the keyring invention, though her reason for listing herself as Aronson rather than Leopoldi remains a mystery.

B. Prosecution

Today, the Aronson patent application is, as far as the author can determine, lost.⁵⁴ What we know about the application is largely based on the factual recitations set out in the judicial opinions in the royalty case litigated during the late 1970s. These facts are sparse:

- Application No. 542,677⁵⁵ was filed on October 25, 1955 listing Jane Aronson as the inventor;⁵⁶
- The Patent Office rejected the application some time in 1956;⁵⁷

⁵² Norbert, of course, was no stranger to the transmutation of names, his own father having changed his legal name from Kohn to Leopoldi. See notes 14-15, *supra*.

⁵³ U.S. Pat. No. 5,129,104 "Belt or band with hollow opening for receiving therein the buckle-end thereof and method of making same" (Jul. 14, 1992).

⁵⁴ Before the advent of electronic filing, the U.S. Patent and Trademark Office did not retain copies of patent applications that were ultimately rejected. Though the Aronson application was eventually submitted to the Board of Patent Appeals, only selected decisions from that body have been retained in electronic databases such as Lexis. The application may have formed a part of the court record in the litigation initiated during the 1970s, but the records from the District Court for the Eastern District of Missouri, in which the litigation was initiated, have been destroyed (email from Steven Boyd, US District Court, Records Clerk, Jan. 19, 2021). The docket records from the Court of Appeals for the Eighth Circuit and the Supreme Court, which I have reviewed, do not contain a copy of the application. Counsel in the case have thus far been unresponsive to requests for information or unable to locate any records from the case. The papers of Erwin Griswold, Quick Point's advocate at the Supreme Court, which are held at Harvard University, make no mention of the case. The current CEO of Quick Point could find no copy of the original patent application in Quick Point's files. Jane's and Norbert's surviving descendants who were interviewed for this article have no written records of the patent application or the case.

⁵⁵ Based on the date of filing, the official Serial Number of the application would have been 03/542,677 (see 37 CFR 1.54).

⁵⁶ Quick Point Pencil Co. v. Aronson, 425 F. Supp. 600, 601 (E.D. Mo. 1976) (*Aronson I*).

⁵⁷ *Id.*

- The application was amended and again rejected in 1957;⁵⁸
- An appeal was filed with the Board of Patent Appeals in 1958;⁵⁹
- On Sept. 27, 1961, the Board issued a final rejection on the simple ground that “the keyholder was not patentable”.⁶⁰
- No further appeal was made (application was “abandoned”).⁶¹

C. License

In June 1956, eight months after the keyring patent application was filed, Norbert and Jane traveled to St. Louis to meet with Gerald Goessling, the President and founder of Quick Point Pencil. Given Norbert's work in specialty advertising, and Quick Point's nearly 30-year track record in the field, it is likely that Norbert was already acquainted with Goessling, or at least with his company. Norbert introduced himself to Goessling as Jane's agent.⁶²

The goal of the meeting was to negotiate a licensing agreement whereby Jane would authorize Quick Point to manufacture keyrings covered by her patent in exchange for a royalty on Quick Point's sales of those keyrings. Jane and Norbert disclosed the patent application⁶³ and a set of prototypes for the keyrings to Goessling⁶⁴ “under confidence”.⁶⁵ Goessling, who had experimented with a novel key holder design twenty years earlier, was impressed and saw the potential of the new design.

On June 26, Goessling sent a two-page letter agreement to Norbert and Jane setting forth the terms of a proposed deal. It provided that:

- Quick Point would have “the exclusive right to make and sell keyholders of the type shown” in the patent application;
- Quick Point would start to manufacture keyrings within 60 days;
- Quick Point would make an up-front advance royalty payment of \$750;
- Royalties would be payable at the rate of 5% of Quick Point's selling price of all licensed keyrings;
- If Quick Point did not sell at least one million units by Dec. 31, 1957, Aronson would have the right to terminate its exclusivity;
- If the volume of sales did not meet Quick Point's expectations, Quick Point could terminate the agreement upon written notice.

⁵⁸ Id.

⁵⁹ Quick Point Pencil Co. v. Aronson, Joint Stipulation of Uncontested Facts, No. 75-1056C(1) at ¶ 12 (E.D. Mo., filed Dec. 6, 1976) [hereinafter Joint Stipulation].

⁶⁰ Aronson v. Quick Point Pencil Co., 440 U.S. 257, 260 (1979) (*Aronson III*).

⁶¹ Id.

⁶² Quick Point Pencil Co. v. Aronson, Complaint for Declaratory Relief, No. 75-1056C(1) at 5 (E.D. Mo., filed Nov. 18, 1975).

⁶³ Aronson I, 425 F. Supp. at 601.

⁶⁴ Interview with Subject 4 (Feb. 21, 2022).

⁶⁵ Quick Point Pencil Co. v. Aronson, Affidavit of Jane Aronson, No. 75-1056C(1) at 5 (E.D. Mo., filed Nov. 4, 1976).

Norbert and Goessling discussed the agreement on June 27 “via Long Distance Telephone”, whereupon Norbert proposed an additional term: if the patent application was not allowed within five years, then Quick Point would pay Jane 2.5% of its keyring sales, “as long as [Quick Point] continue to sell same.” This modification was prescient, as it contemplated the legal landscape absent an issued patent. Though the law in this respect was somewhat unclear in 1961 (it still being three years before the Supreme Court’s landmark patent misuse decision in *Brulotte v. Thys Co.*⁶⁶), it must have been apparent to Norbert (or his attorney) that the rejection of Jane’s patent application would put an end to the royalties payable by Quick Point unless some provision were made to continue them, albeit at a lower rate. Probably without the advice of counsel, Goessling agreed to the proposal by telephone. He and Jane subsequently exchanged countersigned copies of the amendment.

⁶⁶ 379 U.S. 29 (1964).

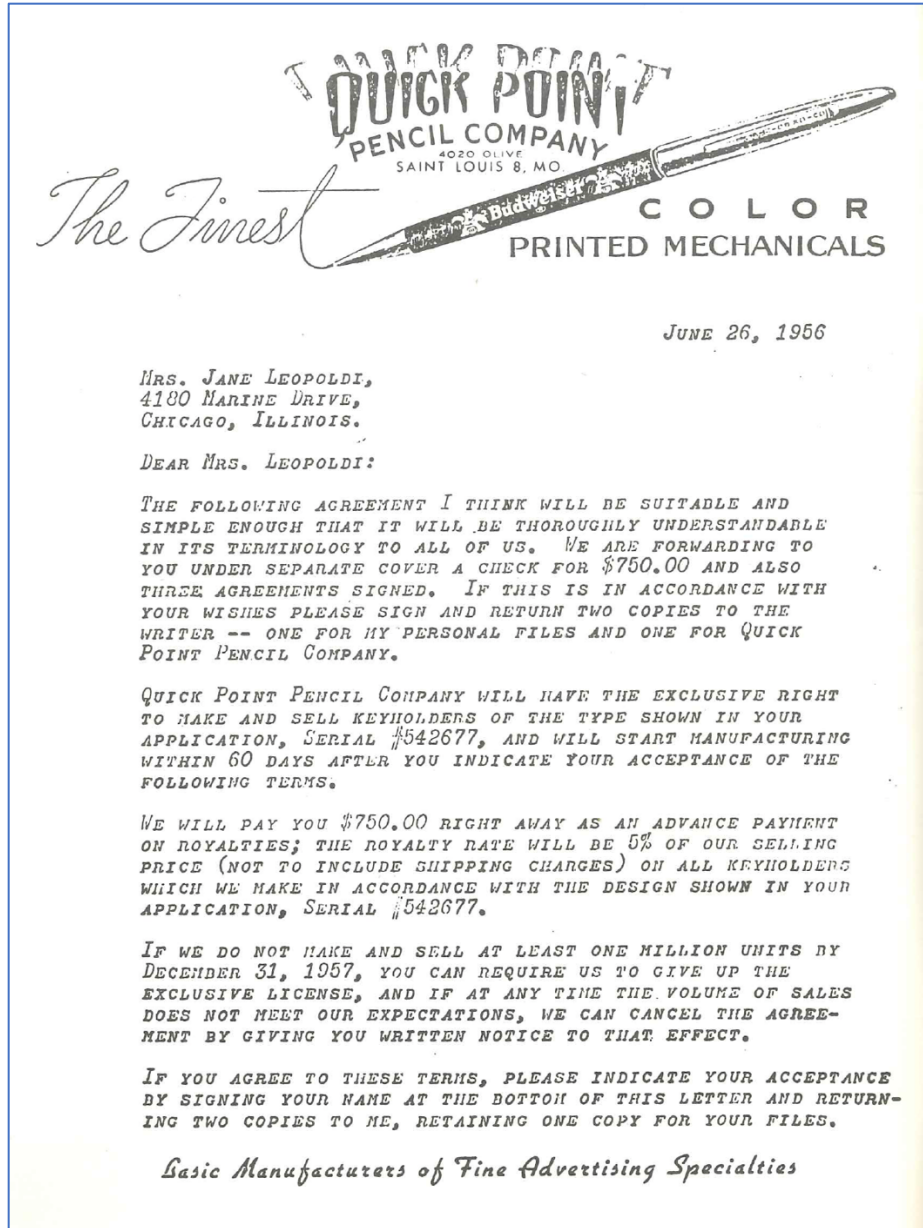


Figure 9 - Contract dated June 26, 1956 between Quick Point Pencil and Jane Leopoldi

D. Production

By July 1956, Quick Point had begun to test materials for production of the keyring. Goessling corresponded with Norbert and Jane about the details, such as whether the “spring” component should be composed of nickel- or cadmium-plated.⁶⁷ Production and sales began soon thereafter.

From July 1956 to March 1957, its first months of production, Quick Point earned approximately \$34,000 on sales of specialty-branded keyrings, paying Jane a 5% royalty of \$1,718. That royalty increased to \$4,000, then \$8,000 by 1961.⁶⁸

In January 1959, the parties entered into a supplemental agreement with respect to keyrings combined with rules, watches and other items. Because the patent application did not cover these other items, which themselves were costly to produce, Quick Point negotiated a flat rate royalty of \$0.0075 (three quarters of a cent) per unit.⁶⁹

Throughout this period, as noted in Section IV.B, above, the Aronson patent application received various rejections from the Patent Office.

E. Another Application

The year 1961 was a watershed in this narrative. First, perhaps anticipating the ultimate rejection of Jane’s patent application, on April 4 Norbert filed a new application with the Patent Office listing himself as inventor (Figure 10). The application seems to have claimed a keyring design that bore a striking resemblance to the design disclosed in Jane’s 1955 application,⁷⁰ yet the new application did not cite Jane’s application or list Jane as an inventor.⁷¹

⁶⁷ Letter dated Jul. 13, 1956 from Gerald Goessling to Mr. and Mrs. N. Leopoldi.

⁶⁸ Joint Stipulation, *supra* note 59, at ¶ 11.

⁶⁹ Supplementary Agreement between Norbert Leopoldi and Quick Point Pencil dated Jan. 27, 1959.

⁷⁰ The principal difference between the claimed Aronson and Leopoldi keyrings is that the opposing prongs of the Aronson spring member exerted pressure *inward* and secured themselves within a groove on the exterior of the plastic disc, whereas the opposing prongs of the Leopoldi spring member exerted pressure *outward* and secured themselves within a slot on the interior of the plastic disc. Interestingly, the two prior art keyrings that are cited in the Leopoldi application and which are available also disclose prongs exerting outward pressure. See U.S. Pat. No. 1,094,568 “Key Ring” (Apr. 28, 1914) and French Pat. No. 1,248,407 “Nouveau système de porte-clefs” (Nov. 7, 1960). The other references (GB 21,311 and IT 574,127 are not currently available via the European Espacenet patent search tool (accessed Jan. 17, 2024).

⁷¹ The consistency of this filing with the applicant’s duty of candor to the Patent Office may be questioned. See also discussion in note 74, *infra*.

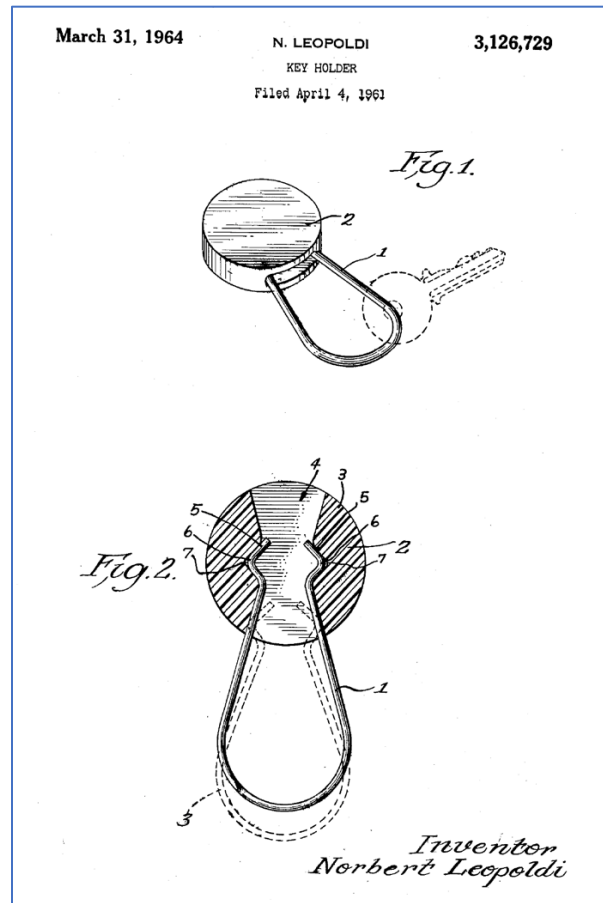


Figure 10 - Norbert Leopoldi key holder patent (1964)

Within days of filing this new application, Norbert approached Gerard Goessling of Quick Point to suggest that Quick Point acquire a license under the new patent application and any resulting patent. During these discussions, Norbert also appears to have suggested to Goessling that he had approached one or more competing manufacturer regarding a potential license of the new application.

Goessling did not receive this news with pleasure. On April 10, Quick Point's attorneys wrote to Norbert, "confirming Mr. Goessling's warning" that any license of a key holder to another company would "constitute a violation of [Jane's] license agreement with Quick Point Pencil".⁷² The attorneys also pointed out that Jane's license "is in respect of the disclosure of [the Aronson] application (not merely in respect of its claims)" and that "[t]his license being exclusive, it follows that you are not free to grant any license to anyone else to make anything disclosed in said application."⁷³ Norbert, apparently intimidated by the firm's warning that further action by Norbert along the lines discussed would result in Quick Point's cessation of royalty payments to Jane, ceased discussions with other companies regarding the new application.

⁷² Letter dated Apr. 10, 1961 from Gravely, Lieder & Woodruff to Mr. Norbert Leopoldi and Mrs. Jane Leopoldi.

⁷³ *Id.*

It is not known whether Norbert had actually approached other companies or which companies they were. He may have suggested this possibility merely as a negotiation ploy to encourage Quick Point to license the new application and restore the royalty rate to 5%, given its imminent reduction to 2.5%. But if this were merely a negotiation ploy, it backfired and, as Norbert admitted years later, he “made no further attempts to exploit” the new application, which was issued as a patent in 1964 with no mention of Jane or her prior application anywhere in its file history.⁷⁴

F. Rejection

On June 26, 1961, the fifth anniversary of the licensing agreement, Quick Point reduced the royalty it paid Jane to 2.5%. Then, on September 27, the Patent Board of Appeals rejected Jane’s application. Though an appeal was possible, Norbert and Jane did not pursue one (possibly because Norbert’s new application was beginning its own prosecution journey through the Patent Office).

The final event that defined 1961 for Jane and Norbert was their divorce after twelve years of marriage. According to each of their families the divorce was amicable. Each of them eventually remarried (he in 1965 and she in 1967) and, though they had no children together, Jane and Norbert each had children with their second spouses. The families remained on good terms, Norbert’s children referring to Jane as “Aunt Janie”.

The divorce led Norbert and Jane to request, in 1965, that Quick Point split its royalty payments evenly between them. Goessling rejected this request, informing Jane by letter that “we will continue our payments to you as per our original agreement and whatever disposition you care to make of these payments is entirely your affair and not the affair of Quick Point Pencil Company.”⁷⁵

G. The Lawsuit

During all of these years, Quick Point continued to manufacture and sell keyrings according to the Aronson design. In 1968, Gerard Goessling, the founder of Quick Point, died, and his son, John G. Goessling, took over the company as president.

By 1975, twenty years after the original licensing agreement was signed, Quick Point had earned more than \$7 million in revenue from the sale of keyrings and paid Jane nearly \$204,000 in royalties. Yet, despite its growing sales volume, Quick Point began to experience competition from other manufacturers. In the late 1960s and early 1970s, at

⁷⁴ U.S. Pat. No. 3,126,729 “Key Holder” (Mar. 31, 1964). It is also interesting that while Norbert clearly *told* Goessling about his new patent application, he never *disclosed* the application to Goessling. As Quick Point’s lawyers remind Jane, “you have several times promised to send a drawing of the proposed new holder to Mr. Goessling”. Gravely Letter, *supra* note 72 (postscript). It is possible that Norbert did not wish to reveal his new keyring design to Goessling because, having seen Jane’s original application, he would realize that the “new” application was uncomfortably similar to the old one and perhaps advise the Patent Office of the same.

⁷⁵ Letter dated Mar. 26, 1965 from G.A. Goessling to Miss Jane Leopoldi.

least eight other manufacturers began to manufacture keyrings “substantially identical” to the Aronson design.⁷⁶ Yet those competitors were not obligated to pay royalties on their sales, giving them a competitive advantage over Quick Point.

As a result, Quick Point filed a declaratory judgment action in the District Court for the Eastern District of Missouri, seeking a declaration that the licensing agreement was void, invalid and unenforceable, a restraint of trade opposed to public policy, indefinite, uncertain and ambiguous, all resulting in Quick Point having no further obligation to pay royalties under the agreement.⁷⁷

The District Court, interpreting the agreement on its terms, ruled in favor of Jane. It reasoned that “[t]his contract is valid as long as plaintiff continues to manufacture and sell the key holders. If plaintiff desires to cease paying royalties, it must also cease making and selling the key holders.”⁷⁸

The Eighth Circuit reversed in a split 2-1 decision. The majority relied, among other things, on *Brulotte*, decided in 1964. It reasoned that Jane “believed her invention was patentable and she submitted a patent application. Had a patent issued she would have had 17 years of exclusive rights to her invention before it became part of the public domain. She approached Quick Point with her idea and the parties entered into a contact anticipating that a patent would issue. If that had happened, under *Brulotte* ... Quick Point’s liability for royalties would have ended after 17 years *in spite of the contract*. ... We do not believe the result should be different here.”⁷⁹

Then, as discussed in the Introduction, the Supreme Court reversed.

V. ARONSON AND EVERYDAY INVENTION

[*Note to readers – this Part is not fully developed and additional citations, etc. will be added*]

The case *Aronson v. Quick Point Pencil* is included in case books because of its implications for the doctrines of patent misuse (there was none) and preemption of state contract law (none here either). Yet *Aronson* is worth study for reasons beyond its doctrinal holdings. In particular, it sheds light on the practice of innovation in mid-twentieth century America, which can inform debates over innovation policy today.

A. Patents and Innovation Policy

Article I, Section 8, Clause 8 of the U.S. Constitution authorizes Congress to establish a patent system in order to promote “the progress of science and useful arts” by giving

⁷⁶ Affidavit of John G. Goessling, Nov. 5, 1976 ¶ 4.

⁷⁷ Complaint, *supra* note x, at x.

⁷⁸ *Aronson I*, 425 F. Supp. at 602.

⁷⁹ *Quick Point Pencil Co. v. Aronson*, 567 F.2d 757, 762 (8th Cir. 1977) (emphasis in original) (*Aronson II*).

inventors, for limited periods of time, the exclusive right to their discoveries. This is the so-called “Progress Clause”, which justifies the exclusivity granted to a patent holder, and the exclusion of others from the market for the claimed invention, on the ground that this exclusivity and the heightened profits that will accrue to the inventor while its rights are exclusive, are necessary to incentivize invention, innovation and other scientific progress. It is a simple argument: without granting some degree of exclusivity to the creator of an invention, imitators could replicate the invention soon after it entered the market and sell it in competition with the inventor. Yet the imitators would have an unfair advantage inasmuch as they did not invest in making the invention and are effectively free riding on the investment of the inventor. This imbalance would eventually discourage innovative firms from investing the necessary resources to make inventions in the first place.⁸⁰ As such, this incentive scheme is directed principally toward encouraging the innovative activity that results in a new invention.

B. *Alternative Incentives*

Yet, as numerous authors have pointed out, there are other ways to incentivize innovation including government grants, procurement contracts, prize systems, and liability waivers.⁸¹ For example, in many academic institutions researchers produce innovations in order to obtain grant funding, to advance their careers, to place papers in prestigious journals, to attract high-quality graduate students, and the like.⁸² Likewise, scholars have identified large bodies of creative and inventive output that are generated by individuals seeking social commendation, reputational gains and personal satisfaction, and for which patents play little or no incentive role.⁸³ Finally, there is an influential strand of literature that explores the growing practice of “user innovation” in which users of technology seek to improve it to enhance their own experiences or to make their use more effective, efficient or even profitable.⁸⁴

C. *Everyday Innovation*

For much of history, when women were excluded from technical occupations, they innovated in areas close to the domestic sphere in which they found themselves operating. For example, Zorina Khan has found that women inventors between 1795 and 1895 in the U.S., Britain and France developed a large number of improvements to “corsets, bonnets, skirts, shoes, and other forms of apparel,” many of which they patented.⁸⁵ The technology of corsets, in particular, owes many of its advances to women, who were its principal beneficiaries (or victims, depending on one’s perspective).⁸⁶ This phenomenon is one of

⁸⁰ [cite Scotchmer, Merges, etc.]

⁸¹ [cite Ouellette, Burstein, Khan, Sichelman, etc.]

⁸² [cites]

⁸³ [Benkler, von Hippel, Silbey, Strandburg, Fisher, Guerrini]

⁸⁴ [von Hippel, Gaia Bernstein, Strandburg]

⁸⁵ B. Zorina Khan, *Designing Women: Consumer Goods Innovations In Britain, France and the United States, 1750-1900 (NBER Working Paper 23086)*, NATIONAL BUREAU OF ECONOMIC RESEARCH (2017), 24, 39-40.

⁸⁶ See Kara W. Swanson, *Getting a Grip on the Corset: Gender, Sexuality, and Patent Law*, 23 YALE J.L. & FEMINISM 57 (2011), 77-78

“everyday” innovation – the improvement of the apparatus of our daily lives, made by ordinary people who act not to build companies or win academic awards, but to improve their own comfort, enjoyment, health or efficiency.

This category comfortably encompasses Jane Aronson and her novel keyring design. As discussed above, the primary motivations for its invention were to improve the lives of keyring users (which is nearly everyone) by avoiding broken fingernails and easing the burden on arthritis sufferers. Though Jane sought a patent on the invention, it does not appear that obtaining a patent or the market exclusivity that it afforded were principal motivations behind her making the initial invention.

Norbert, however, may have responded to a different, and more traditional, set of incentives. His business – specialty advertising – required him to offer a range of memorable yet inexpensive products that his clients could imprint with their names and logos. Jane may have devised a spring and disc keyring design that could easily be opened and closed, but it seems more likely that Norbert had the idea to imprint advertising copy on the surface of the disc. Norbert was an archetypical amateur inventor; the list of his many patented inventions reads like the contents of a cabinet of technological curiosities: an egg opening device, a steel measuring device, an improved umbrella, a garment hanger, a memo clip attachment for a telephone, a fingernail file, a tongue-depressor dispenser, a carton cutter, a reading light magnifier, a lever adapter for door knobs, a pill cutter, an inflatable garment-carrying bag, an absorbable cleaning mitt for wiping babies and, of course, a number of novel key holders.⁸⁷

D. *The Commercialization Incentive*

Perhaps the most interesting aspect of the innovation story told by *Aronson* concerns Quick Point Pencil. It licensed the Aronson keyring invention with the hope that it would soon be patented. As a manufacturer, the exclusivity afforded by a patent could be extremely valuable, particularly with respect to a product that is inexpensive and relatively easy to manufacture. When a patent failed to materialize, Quick Point reported, with disappointment, that at least eight competitors had entered the market for specialty keyrings of the same design.⁸⁸ But whether or not the patent eventually issued, in 1956 Quick Point entered into an arrangement with Jane and Norbert with the *expectation* of a patent. The potential patent thus acted as an incentive, and perhaps the main incentive, for Quick Point to enter into the relationship with Jane and Norbert.

In this regard, a patent (or a potential patent) serves a different incentive function than that contemplated by the Constitution, which was drafted in a pre-industrial era when a patent holder generally produced whatever article he had patented.⁸⁹ The Constitutional incentive is aimed at inducing inventors to innovate, but the patent in Quick Point's case served as an incentive to make a deal with an inventor so that the invention could be *commercialized*.

⁸⁷ List patent numbers and names.

⁸⁸ [cite]

⁸⁹ See ROBERT P. MERGES, *AMERICAN PATENT LAW: A BUSINESS AND ECONOMIC HISTORY* (2022). at x.

Commercialization of a technology is a second, and somewhat independent, activity from its initial invention, yet as cases like *Aronson* show, it is critical to bringing new technologies to the market. This reality forms the crux of the academic-industrial licensing ecosystem as enabled by the Bayh-Dole Act of 1980,⁹⁰ in which inventions that are made in university laboratories, often funded by government grants, are patented. Those patents are then licensed to private firms for commercial exploitation. Like Jane and Norbert, university researchers, and universities themselves, are largely incapable of manufacturing commercial products. Thus, commercializing licensees are essential to bringing innovative technologies from the laboratory (or the drawing room) into productive use.⁹¹

In the end, however, the commercialization incentive may feed back into the Constitutional incentive to innovate. In other words, without commercialization by *someone*, even if not the original inventor, most inventions would never reach a broad market. In fact, depending on how difficult they are to produce, they might not even benefit the inventor (Jane, for example, without the help of Quick Point, probably could not have produced her own keyrings). Thus the incentive to commercialize may be part and parcel with the incentive to invent: two sides of the same coin. In this respect, *Aronson* may be read as an inspirational story: anyone with a bright idea and a little bit of gumption can become an inventor. Even better: the legal system is there to help bright individuals to transact on an equal footing with corporate entities, improving the lives of others and contributing to the economy.

VI. PATENTS THROUGH THE LENS OF GENDER

Despite its hopeful message concerning everyday innovation, *Aronson* also highlights very real gender disparities that have burdened the innovation economy historically and continue to affect it today.

A. *The Scarcity of Women Patent Holders*

Though it was uncommon for a woman in Jane Aronson's position to apply for a patent during the 1950s, it was not unprecedented, and anecdotes about successful women inventors now populate the literature of innovation diversity. Zorina Khan identifies the first U.S. patents seemingly issued to women as follows: "Hazel Irwin, a Boston resident, obtained a United States patent for a cheese press in 1808, and the following year Mary Kies of Connecticut obtained a patent for weaving straw."⁹² In the years immediately following the Civil War, Margaret Knight, who invented a highly effective paper bag

⁹⁰ [cite Act]

⁹¹ These concepts have been discussed in detail by scholars including Jonathan M. Barnett, *Why Is Everyone Afraid of IP Licensing?*, 30 HARV. J. L. & TECH. 123 (2017).; Ted Sichelman, *Commercializing Patents*, 62 STAN. L. REV. 341 (2010). [expand on work of Barnett and Sichelman].

⁹² See Zorina Khan, "Not for Ornament": Patenting Activity by Nineteenth-Century Women Inventors, 31 J. INTERDISCIPLINARY HIST. 159 (2000), 165)

folding machine, founded a successful industrial company and “became a major inventive force in a number of nineteenth-century industries”, eventually obtaining 14 patents.⁹³ In the early twentieth century, Beulah Louise Henry, with 49 patents to her name (one posthumous) was celebrated as the “Lady Edison”, having invented improvements for typewriters, toys, sewing machines, apparel and an assortment of other products.⁹⁴ And Hedy Lamarr, the Hollywood actress promoted as “the most beautiful woman in the world”, worked with *avant garde* composer George Antheil in 1941 to invent a frequency-hopping radio communication system that had the potential to guide torpedoes with a reduced risk of enemy transmission jamming.⁹⁵ One assistant patent examiner writing in 1927 proudly proclaimed that “[a] perusal of the index of inventors for any of the recent years will show the names of a large number of women listed.”⁹⁶

Yet these success stories belie the reality that women have historically been (and continue to be) vastly underrepresented among U.S. patent holders.⁹⁷ For example, Zorina Khan reports that prior to 1860, only 77 U.S. utility patents were issued to women,⁹⁸ out of a total of approximately 41,000 patents.⁹⁹ While the number of patents issued to women increased after the Civil War, women’s share of patent issuances remained about 1% throughout the nineteenth century. Later gains were not dramatic: during the 1910s, the share of patents issued to women was less than 2%,¹⁰⁰ from 1976 to 2013 it was less than 8%,¹⁰¹ and as recently as 2019 was still a mere 12.8%.¹⁰²

⁹³ See MERGES, *supra* note 89., 238-40.

⁹⁴ See U.S. Patent & Trademark Off., *There’s a Better Way of Doing That*, <https://www.uspto.gov/learning-and-resources/journeys-innovation/historical-stories/theres-better-way-doing>.; Joseph Rossman, *Women Inventors*, 10 J. PAT. OFF. SOC’Y 18 (1927), 19.

⁹⁵ See RICHARD RHODES, *HEDY’S FOLLY: THE LIFE AND BREAKTHROUGH INVENTIONS OF HEDY LAMARR, THE MOST BEAUTIFUL WOMAN IN THE WORLD* (2011). Though Lamarr’s and Antheil’s invention was awarded a patent in 1942, the U.S. Navy, which acquired the patent, never produced or utilized the invention. *Id.* at 155-58. Though frequency hopping (which became known as spread spectrum communication) was employed in a range of telecommunications applications years after the expiration of the patent, it is not clear whether any of the developers of these later technologies relied on, or even knew about, the Lamarr-Antheil invention. *Id.* at 162-68, 172-75.

⁹⁶ Rossman, *supra* note 94, at 19.

⁹⁷ The situation is not much better outside the U.S. See ELODIE CARPENTIER & JULIO RAFFO, *THE GLOBAL GENDER GAP IN INNOVATION AND CREATIVITY* (WIPO DEVELOPMENT SERIES) (2023).; UK INTELL. PROP. OFF., *GENDER PROFILES IN WORLDWIDE PATENTING* (2019).

⁹⁸ It is likely that counts of women patentees are understated, given gender-ambiguous names, women who filed using only their first initials, and women who permitted a husband or other relative to file on their behalf. See Deborah J. Merritt, *Hypatia in the Patent Office: Women Inventors and the Law*, 35 AM. J. LEGAL HIST. 235 (1991), 245; Khan, *supra* note 92, at 164.

⁹⁹ U.S. Patent & Trademark Off., U.S. Patent Activity Calendar Years 1790 to the Present, https://www.uspto.gov/web/offices/ac/ido/oeip/taf/h_counts.htm (visited Jan. 3, 2024).

¹⁰⁰ W. Michael Schuster et al., *An Empirical Study of Patent Grant Rates as a Function of Race and Gender*, 57 AM. BUS. L. J. 281 (2020), 284 (citing Women’s Bureau, U.S. Dep’t of Labor, *Women’s Contributions in the Field of Invention: A Study of the Records of the United States Patent Office*, 28 Bull. Women’s Bureau 1, 2-3, 13 (1923)).

¹⁰¹ Cassidy R. Sugimoto et al., *The Academic Advantage: Gender Disparities in Patenting*, 10 PLOS ONE e0128000 (2015).

¹⁰² U.S. Patent & Trademark Off., *Progress and Potential 2020 update on U.S. women inventor-patentees 2* (Jul. 2020), <https://www.uspto.gov/sites/default/files/documents/OCE-DH-Progress-Potential-2020.pdf>.

B. *Invention and Patenting by Women in the Nineteenth Century*

As discussed in Section V.A, above, given their exclusion from the technical work force, women have historically innovated in fields close to the home. The patents issued to women inventors have mirrored this trend. Zorina Khan has found that nearly one-third of all U.S. patents issued to women between 1795 and 1895 (and more than 40% of such patents in Britain and France) covered consumer goods, with around 20% of these patents in all three countries directed to “corsets, bonnets, skirts, shoes, and other forms of apparel.”¹⁰³ Kara Swanson finds that “[a]lmost one quarter of corset-related patents issued in the United States before 1880 were issued to women.”¹⁰⁴ Thus, unlike the industrial packaging equipment of Margaret Knight or the radio signaling technology of Hedy Lamarr, a significant number innovations historically patented by women addressed the problems that women encountered in their daily lives.

Zorina Khan has also compiled telling data regarding the social situations of women who obtained U.S. patents during the nineteenth century. First, she finds that 92% of women inventors worked alone, without co-inventors, “indicating the independent nature of female inventive activity.”¹⁰⁵ Supporting this view, she also finds that 66% of women inventors worked outside the home in a range of occupations including artisan and manufacturer, but also as professionals or “businesswomen”.¹⁰⁶ Despite their independence, 40% of these women inventors were married, with 39% widowed and only 21% single.¹⁰⁷

Of those women inventors who listed co-inventors in their patents, over 36% co-invented with related men (husbands, brothers and fathers), while 47% invented with unrelated men (often machinists, engineers, pattern makers, toolmakers, manufacturers, and artisans with whom they collaborated to reduce an invention to practice).¹⁰⁸ Only 17% of women co-invented with other women (either related or unrelated).

Khan’s data regarding nineteenth century patenting by women may illuminate practices and attitudes during the post-war period half a century later.

C. *Theories About Patent and Gender*

Numerous theories have been advanced to explain this shortfall in the representation of women among successful applicants for U.S. patents. Colleen Chien summarizes a range of “inequalities of opportunity to innovate” that affect women, including “historical and structural factors such as institutional discrimination, limited educational opportunities,

¹⁰³ Khan, *Designing Women*, *supra* note 103, at 24, 39-40.

¹⁰⁴ Swanson, *supra* note x, at 77.

¹⁰⁵ Khan, *Designing Women*, *supra* note 103, at 17 and 37, Table 1.

¹⁰⁶ Khan, *Designing Women*, *supra* note 103, at 38, Table 2.

¹⁰⁷ Khan, *Designing Women*, *supra* note 103, at 37, Table 1.

¹⁰⁸ Khan, *Designing Women*, *supra* note 103, at 17 and 37, Table 1 (determining relatedness based on surname).

and inadequate access to capital,” as well as “girls selecting out of STEM classes, women having stronger comparative advantages in reading and non-STEM fields, or differences in preferences.”¹⁰⁹ Others have focused on social factors such as work environment and the socio-economic context of the family.¹¹⁰ Jordana Goodman has recently analyzed patenting in academic settings, finding disparities between patents issued to male and female inventors (as well as Black inventors) to be attributable, in part, to “tenure publication expectations, existing cultural frameworks ... and the differing burdens of faculty mentorship”.¹¹¹ Kyle Jensen and co-authors have detected bias against women inventors at the Patent Office and among patent examiners.¹¹²

Beyond these pragmatic explanations, Jessica Lai has argued that patent law itself is, as a structural matter, biased against women, as “men do the kinds of inventing that are protected by patents.”¹¹³ Dan Burk notes that legal standards in patent law, such as the “person having reasonable skill in the art” (PHOSITA) are inherently biased against women inasmuch as they “foster[] a view of innovation that is detached, isolated, and divorced from the community.”¹¹⁴ These observations lead Burk to question the “current purposes of the patent system itself”, theorizing that

[t]he patent system is generally justified as intended in some fashion to promote technological innovation, but it may be that the desire to do so reflects an unhealthy patriarchal drive toward domination of resources, both material and social. The patent system might be working well ... but we might be concerned that even if it is working ‘well’ in the sense of promoting technological innovation, it is in a different sense working poorly because technological innovation is simply a bad idea. To the extent that technological innovation translates into accelerated and expanded means of consumption, we might be concerned that promoting technological innovation effectively means promoting environmental disaster, social disparity, materialism, and personal alienation.”¹¹⁵

¹⁰⁹ Colleen V. Chien, *The Inequalities of Innovation*, 72 EMORY L.J. 1 (2022), 13 (footnotes and citations omitted).

¹¹⁰ See CARPENTIER & RAFFO, *supra* note 97, at 3 (summarizing literature).

¹¹¹ Jordana R. Goodman, *Sy-STEM-Ic Bias: An Exploration of Gender and Race Representation on University Patents*, 87 BROOK. L. REV. 853 (2022), 893.

¹¹² Kyle Jensen, Balász Kovács & Olav Sorenson, *Gender Differences in Obtaining and Maintaining Patent Rights*, 36 NATURE BIOTECHNOLOGY 307 (2018), 309 (“approximately two-thirds of the lower probability of acceptance for applications with women inventors stemmed from the examiner side”).

¹¹³ JESSICA C. LAI, *PATENT LAW AND WOMEN: TACKLING GENDER BIAS IN KNOWLEDGE GOVERNANCE* (2022), 4.

¹¹⁴ Dan L. Burk, *Do Patents Have Gender*, 19 AM. U. J. GENDER SOC. POL’Y & L. 881 (2011), 903.

¹¹⁵ *Id.* at 906.

VII. THE UNSOLVED MYSTERY OF ARONSON

What really happened in *Aronson*, and why should it matter to scholars, lawyers and judges today? The case is perplexing on a number of fronts and frustrating in its missing details. But even the reasons for these lacunae are unclear. Was somebody trying to hide something and, if so, what? This final section speculates about the unanswered questions of *Aronson v. Quick Point Pencil*.

A. Here's to you, Mrs. Aronson

In its published opinion in *Aronson*, the District Court for the Eastern District of Missouri refers to Jane as “Defendant”. The Eighth Circuit, following customary judicial practice, refers to her by her surname (as listed in the patent application) -- “Aronson”. It is only at the Supreme Court that Justice Burger, in his majority opinion, and Justice Blackmun in his concurrence, refer to Jane as “Mrs. Aronson”, using the traditional gendered honorific indicating that a woman is married.

Today, of course, the honorific “Mrs.” is rarely used and has largely been replaced by the status-neutral (though still gendered) “Ms.” (which today is being challenged by “Mx” and other gender-neutral honorifics).¹¹⁶ The replacement of Mrs. with Ms. in common usage was a gradual process that began during the “women’s liberation” movement of the 1960s and gained significant attention with the launch of *Ms.* magazine (its logo, “more than a magazine, a movement”) in 1972.¹¹⁷ Yet it was only in 1986 that the stalwart *New York Times* acknowledged that ‘Ms.’ had “become a part of the language” and adopted the use of the honorific in its news and editorial columns (though it would continue to use ‘Mrs.’ and ‘Miss.’ “when it knows the marital status of a woman in the news, unless she prefers ‘Ms.’”).¹¹⁸

Chief Justice Burger, in his early 70s when he wrote the opinion in *Aronson*, may perhaps be forgiven for his failure to adapt to the emerging usage conventions of the day. The rest of the Burger Court largely followed suit. A Lexis search of 1979 Supreme Court opinions identifies five cases other than *Aronson* in which the term “Mrs.” appears. One such usage is a merely quotation from a document in the case record.¹¹⁹ One refers to the victim of a homicide.¹²⁰ And the other three refer to women in cases involving family

¹¹⁶ See Katy Steinmetz, *This Gender-Neutral Word Could Replace ‘Mr.’ and ‘Ms.’*, Time, Nov. 10, 2015, <https://time.com/4106718/what-mx-means/>.

¹¹⁷ See Meliss Arteaga, *Today in Feminist History: The New York Times Says “Ms.”*, Ms., Jun. 20, 2017, <https://msmagazine.com/2017/06/20/today-feminist-history-new-york-times-says-ms/> (adopting the term “as a standard form of address by women who want to be recognized as individuals, rather than being identified by their relationship with a man.”)

¹¹⁸ Id.

¹¹⁹ *Davis v. Passman*, 442 U.S. 228 (1979) (“The full text of Passman’s letter is as follows: ‘Dear Mrs. Davis...’”)

¹²⁰ *Jackson v. Virginia*, 443 U.S. 307 (1979) (“That the petitioner shot and killed Mrs. Cole was not in dispute at the trial”).

members having the same surname (a child custody case,¹²¹ a tax case¹²² and an alimony case¹²³), largely for purposes of disambiguation. During the same period, only three Supreme Court opinions used the honorific “Ms.”¹²⁴ and one used the outdated honorific “Miss” in reference to an individual (the latter simply quoting the testimony of a witness).¹²⁵ Of the “Ms.” uses, two involved disambiguation of married individuals in the footnotes of factual recitations.¹²⁶ The third, however, was a gender discrimination case brought under the Equal Protection Clause, and the plaintiff, “Ms. Feeney” is (appropriately) referred to by Justice Stewart twice using the honorific ‘Ms.’

Aronson, however, is the only 1979 case in which the principal litigant is referred to repeatedly (19 times) by the honorific “Mrs.,” with no apparent need for disambiguation (i.e., though Jane’s husband Norbert is mentioned briefly in the opinion, his surname was Leopoldi, not Aronson). Even so, the justices were assiduous in applying the “Mrs.” label to Jane. In his bench copy of the first draft of the opinion,¹²⁷ Justice Blackmun circled the word “Mrs.” in pencil the first time it appeared – was he surprised? Concerned? Curious? Then, in the second draft, Chief Justice Burger carefully inserted “Mrs.” before “Aronson” on page 3, at a location where he had previously omitted it.¹²⁸

Yet despite this level of care, the justices’ repeated references to Jane as “Mrs. Aronson” are particularly puzzling because, as noted in the Introduction to this essay, there was no Mrs. Aronson, at least not one who had any relation to the matter at hand. At the time of the Supreme Court case, Jane had long been remarried and used her second husband’s surname, Hossfeld. And when she filed her patent application in 1955, her surname was Leopoldi (as reflected in her 1954 German sponge patent). Her legal name was Jane Aronson only before her marriage to Norbert, when it was, in terms of outdated marital-status honorifics, “Miss” Aronson, not “Mrs.”.

Of course, as discussed above, there may have been good reasons (or at least plausible reasons) for Jane to file her patent application under the name Aronson.¹²⁹ But whatever the ethical and legal merits of this stratagem, it in no way made Jane into “Mrs. Aronson”. So Chief Justice Burger’s usage, while it might be excused in another case as disambiguation or, at worst, a somewhat antiquated sign of respect, here seems to highlight Jane’s marital status more insistently – a status that, unlike that in a case involving child custody or alimony, has absolutely nothing to do with the merits. It is, rather, a belittling

¹²¹ *Caban v. Mohammed*, 441 U.S. 380, 382-83 (1979) (referring to “Mrs. Mohammed”, the mother of Maria Mohammed, a party to the case, referred to throughout by her first name).

¹²² *United States v. Caceres*, 440 U.S. 741 (1979) (IRS bribery prosecution against husband and wife).

¹²³ *Orr v. Orr*, 440 U.S. 268 (1979) (alimony dispute between divorced spouses).

¹²⁴

¹²⁵ *Green v. Georgia*, 442 U.S. 95, 96 n. 2 (1979), *United States v. Rutherford*, 442 U.S. 544, 548 n. 4 (1979).

¹²⁶ *United Gas Pipe Line Co. v. McCombs*, 442 U.S. 529, 531 (1979) (Marshall, J.).

¹²⁷ *Aronson v. Quick Point Pencil Co.*, No. 77-1413, 1st Draft (Jan. 19, 1979) (Justice Blackmun’s files, U.S. Library of Congress).

¹²⁸ *Aronson v. Quick Point Pencil Co.*, No. 77-1413, 2nd Draft (Jan. 22, 1979) (Justice Blackmun’s files, U.S. Library of Congress).

¹²⁹ See notes x, *supra*, and accompanying text.

of Jane and her inventive achievement: a design that Justice Burger describes as “ingenious ... [but] so simple that it readily could be copied unless it was protected by patent.”¹³⁰

In fact, it may have been the simplicity of Jane’s invention, coupled with her non-threatening status as a married woman, that endeared Jane and her invention to the Court. In its larger context, *Aronson* was decided during a busy time in the Court’s developing patent law jurisprudence. In 1972 the Court decided *Gottschalk v. Benson*,¹³¹ concerning the eligibility of computer software patents, followed in 1978 by *Parker v. Flook*,¹³² another complex algorithmic patenting case. Then in 1980, the Court heard two of the most significant patent cases of the century, *Diamond v. Diehr*,¹³³ finally settling the question of algorithmic patentability in the context of a process for curing rubber, and *Diamond v. Chakrabarty*,¹³⁴ a monumental 5-4 decision that opened the door to the patenting of genetically modified living organisms. Amidst these hotly contested cases concerning complex and unfamiliar technologies,¹³⁵ Jane’s novel keyring design must have seemed a breath of fresh air: for once, an invention that the justices could actually *understand*.

B. Will the Real Aronson Keyring Please Stand Up?

While the justices of the Supreme Court may have viewed Jane and her keyring with a measure of paternalistic affection, the examiners at the Patent Office almost certainly did not.

As discussed above,¹³⁶ Jane’s original patent application appears to be lost. Even in 1978, at the time of the Supreme Court case, *amicus curiae* Ercon, Inc. appears frustrated that the application is missing from the court’s record and is not otherwise available.¹³⁷ Likewise, during oral argument, one of the justices asked Jane’s counsel whether there was a picture or representation of the keyring anywhere in the record.¹³⁸ Counsel responded that there was no representation of the keyring in the printed record, but that “an actual sample of the key ring” may have been “attached to the record which came to the court”.¹³⁹ He continues that “the closest thing that describes it is a catalog of the respondent Quick

¹³⁰ *Aronson III*, 440 U.S. at 259.

¹³¹ 409 U.S. 63 (1972).

¹³² 437 U.S. 584 (1978).

¹³³ 450 U.S. 175 (1981).

¹³⁴ 447 U.S. 303 (1980).

¹³⁵ As Christopher Seaman and Sheena Wang observe, “the Justices and their law clerks were fully aware of the importance of the issue of patent eligibility and how it might shape the development of the nascent computer software and biotechnology industries, but often felt out of their depth when it came to understanding both the complexity of patent law and the intricacies of the technical details in these cases.” Christopher B. Seaman & Sheena X. Wang, *An Inside History of the Burger Court’s Patent Eligibility Jurisprudence*, 53 AKRON L. REV. 915 (2020).

¹³⁶ See note x, *supra*.

¹³⁷ *Aronson v. Quick Point Pencil Co., No., 77-1413*, Brief for Ercon, Inc., as Amicus Curiae, 1978 WL 207175 (U.S.) (Appellate Brief).

¹³⁸ *Aronson v. Quick Point Pencil Co., No. 77-1413*, Transcript of Oral Argument 3 (Dec. 6, 1978).

¹³⁹ *Id.*

Point, which is in the printed record, but you cannot see the inside of the key ring.”¹⁴⁰ Erwin Griswold, Quick Point’s counsel, does him one better. He produces a keyring, presumably made by Quick Point, and displays it to the bench. “I have one of them here,” he tells the Chief Justice, “and that’s it, and you put your keys on and then you, with a little force, press it back.”¹⁴¹

During the argument, Jane’s counsel is at pains to explain that the Aronson keyring design is different than both the design claimed in Norbert’s later patent, and also a British patent that amicus Ercon disclosed in its brief.¹⁴² The British patent, issued to Ernest John Drown, an employee of Graham Products Limited, claims “a two-piece keyholder consisting of an ornamental medallion and a resilient wire loop for holding keys, which is detachable from the medallion by pressing together the free ends of the resilient loop.” It was issued in 1954, a year before the filing of Jane’s patent application. Both Norbert’s and Drown’s patented designs use a wire loop whose ends exert outward pressure, which secures them against the interior surface of the medallion. The wire prongs of the keyring sold by Quick Point, however, exert *inward* pressure, securing them against the outer surface of the medallion. This is a significant difference that would likely enable an applicant to traverse an anticipation or obviousness objection based on these other designs.

These facts support two possible narratives that can explain what happened to Jane’s patent application and why it was rejected. The first narrative goes as follows: Jane’s application disclosed and claimed a novel keyring with prongs that exerted inward pressure, as shown in Quick Point’s catalog and manufactured and sold by Quick Point. No prior art key holder utilizes this design, so the application’s continued rejection seems wrong. Though it is impossible to rule out any number of defects in the application that led to its rejection, it seems likely that most technical defects could have been addressed over five years of prosecution.¹⁴³ Another strong possible explanation is gender bias at the Patent Office. Such bias, as discussed in Part x, above, clearly exists today, and was likely even more pronounced during the 1950s. As such, filing the application in Jane’s name may have been a tactical error on the part of Jane and Norbert, who might have fared better filing in Norbert’s name, a “masking” strategy successfully used by other women inventors in the past.¹⁴⁴ Under this version of the story, Norbert’s decision to file subsequent patent applications in his own name is sensible. In fact, his later keyring design with outward-pressing prongs sailed through the Patent Office with little objection, notwithstanding the citation of at least two other keyring designs with outward-pressing prongs.¹⁴⁵

But this story places significant explanatory weight on gender bias, even in the face of an invention of striking novelty. And while women inventors have historically faced significant hurdles within the patent system, they have also obtained numerous patents, particularly on improvements to household goods and everyday articles.

¹⁴⁰ Id. It is likely that this image is the one shown in Figure 7.

¹⁴¹ Oral Argument Transcript, *supra* note 138, at 27.

¹⁴² GB Pat. No. 707,615 “Improvements in or relating to Key Holders” (Apr. 21, 1954).

¹⁴³ Notably, Norbert’s 1961 application contained errors that were eventually corrected through a Certificate of Correction.

¹⁴⁴ See notes x, *supra*, and accompanying text.

¹⁴⁵ See notes x, *supra*, and accompanying text.

So a second narrative may be worth considering. In this narrative, Jane's 1955 application was identical to Norbert's 1961 application, both claiming a two-piece keyring whose prongs exerted *outward* pressure, as also disclosed by Drown. In other words, Norbert's 1961 application was little more than a copy of Jane's application, with the inventor changed from her to him. This would explain why Norbert never disclosed his 1961 application to Gerard Goessling at Quick Point – Goessling would have seen immediately that they were one and the same application. It also explains why Norbert never entered Jane's original application into the record of the litigation brought by Quick Point in 1976. Were he to do so, then his subterfuge would be exposed.

But why re-file the same patent application under a new name after it had been steadfastly rejected the first time? Perhaps because the examiner assigned to review Jane's patent found that the design with outward-pressuring prongs was clearly anticipated by the Drown patent or other prior art devices. After five years of prosecution, the objection could not be overcome. But Norbert, the former chess hustler, may have found a way to beat the patent system. If he re-filed the application in his own name, omitting any reference to Jane's prior application or the Drown patent, the examiner randomly assigned to review the new application might never find Drown's British patent. And in the days before electronic databases and workflow management software, there would be little chance that the second examiner would conduct the investigation necessary to discover that an application assigned to him had already been examined by one of his colleagues. And perhaps this sleight of hand paid off. Norbert's patent was granted, with no citation to the Drown patent or Jane's prior application.

But if this second narrative reflects what actually happened, and Jane's patent application disclosed a keyring with outward-pressuring prongs, then how did Quick Point come to manufacture a keyring with *inward*-pressuring prongs? One possible explanation lies within Quick Point itself and the ingenuity of Gerald Goessling, its founder. Recall that Goessling himself was a serial inventor and had even obtained a patent on an improved key holder. It is entirely possible that, while prototyping the new keyring for production at his facility, Goessling determined that a keyring with inward-pressuring prongs secured against the outer rim of a medallion would be more reliable and easier to manufacture than one with outward-pressuring rings inserted into the body of the medallion. Could he have patented his improvement to the Aronson design? Probably. But perhaps he was, at that time, more focused on the practicalities of business than patenting. After all, he had already paid for a license to make the keyring and had no intention of authorizing others to make competing products under the improved design. Moreover, he may have been concerned that Norbert and Jane might challenge any patent deriving from their original design, particularly after they disclosed their secret design to him.¹⁴⁶

So Quick Point manufactured the improved keyring and sold it for twenty years. Gerard Goessling died in 1968, and by the time that his son John decided that Quick Point should no longer be paying royalties to Jane, nobody at Quick Point knew or remembered that the

¹⁴⁶ It is unclear that any such claim would have been successful, but not unlikely that one would have been brought.

actual design had been perfected by Goessling. Nobody, that is, except Norbert and maybe Jane. Which again explains why he never entered Jane's original application into evidence during the case. Doing so would have shown that they keyring being manufactured by Quick Point, and as to which Quick Point had already paid so much in royalties, was not actually covered by the specification of the denied Aronson patent.

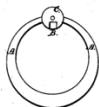

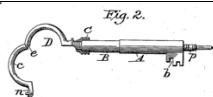
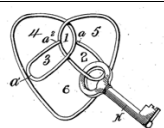
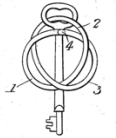
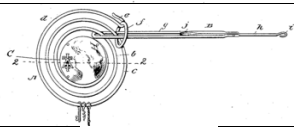

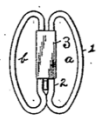
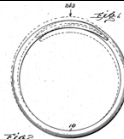
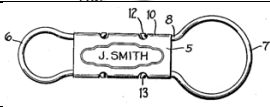
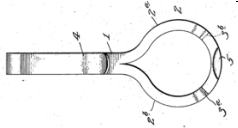
Finally, we may ask what Jane knew about all of this. Was she an active participant in what may, at root, have been a scheme to defraud the Patent Office? Or was Norbert's application based on hers an attempt to push her aside and cut her out of future royalties on the increasingly lucrative keyring business. Recall that in 1961, the same year that Norbert filed his patent application and Quick Point reduced its royalty payments, Jane and Norbert were divorced. Did these transactions have anything to do with their parting of ways? And, if so, how?

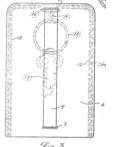
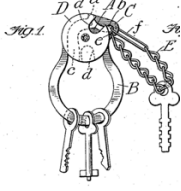
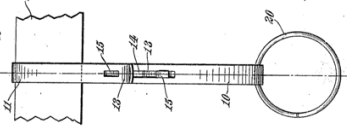
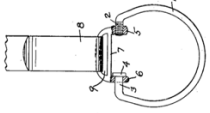
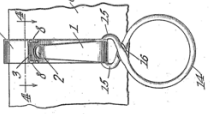
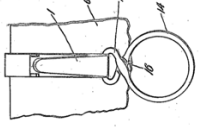
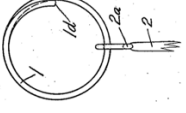
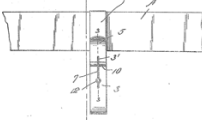
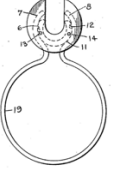
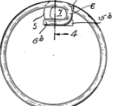
One "reading" of the narrative is that Norbert leveraged his marital relationship with Jane to hijack her name as the listed inventor of a device that he hoped to commercialize. But this reading may be overly simplistic. Jane was a creative individual who probably contributed more than a modicum of inventive ingenuity to the keychain design that bore her name. Perhaps Norbert orchestrated their agreement with Quick Point, but someone, perhaps not he, eventually decided to end their domestic relationship at a time when such endings were less than common.

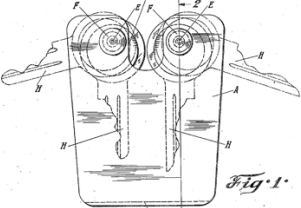
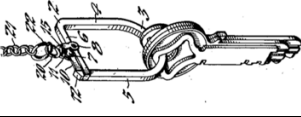
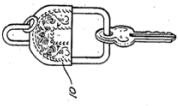
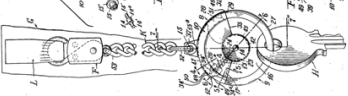
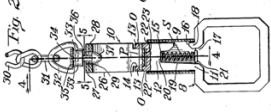
CONCLUSIONS

Aronson v. Quick Point Pencil Co. remains an enigmatic case in the patent law canon. Though it sets out important doctrine regarding patent misuse and preemption, it also illuminates broader issues surrounding innovation policy that are increasingly relevant today. But *Aronson* also highlights the very real gender disparities that continue to burden the innovation economy. *Aronson's* historical insights support efforts aimed at addressing these persistent issues today. But perhaps the most fascinating aspect of *Aronson* is its unsolved mysteries: what did the Aronson patent application actually cover, why did it go missing, and why was it really rejected?

Appendix A
 U.S. Patents Covering Keyring Designs (Pre-1955)

Issuance Date	U.S. Patent No.	Title	Image
08/10/1869	93,506	Improved key-ring and check	
11/11/1879	221,571	Improvement in key-rings	
03/15/1892	470,997	Combined key ring and pencil	
04/28/1903	726,781	Key ring	
09/15/1903	739,094	Key-ring	
02/21/1905	783,091	Puzzle key-ring	
02/06/1906	811,693	Key ring	
06/04/1907	855,530	Key-ring	
08/31/1909	932,787	Key-ring	
04/28/1914	1,094,568	Key Ring	
09/15/1914	1,110,873	Key-ring	

Issuance Date	U.S. Patent No.	Title	Image
05/11/1915	1,139,370	Key-holder	
06/13/1916	1,187,471	Key ring	
06/27/1916	1,189,199	Key-ring holder	
04/27/1920	1,338,085	Key-ring	
06/13/1922	1,419,408	Key ring and holder	
08/22/1922	1,427,016	Key ring	
07/17/1923	1,462,205	Key ring and the like	
08/12/1924	1,504,639	Key-ring holder	
07/20/1926	1,593,254	Key ring	
08/04/1931	1,817,246	Lockable key ring	

Issuance Date	U.S. Patent No.	Title	Image
04/30/1935	1,999,290	Key Container	
07/21/1936	2,048,599	Key holder	
1/27/1948	2,435,152	Key ring construction	
10/28/1952	2,615,324	Key-ring	
06/02/1953	2,640,237	Detachable key ring	
12/27/1955	2,728,501	Key bracelet	