

## 10,000,000+ U.S. Patents Issued – Look How Far We've Come

06.20.2018

**June 19, 2018 – the epic day U.S. Patent No. 10,000,000 was issued.** The U.S. government has now issued more than 10 million patents, and it's time we reflect on how far we've come. We all enjoy the countless benefits of patented inventions every day, often without realizing it. As we honor this exciting time in U.S. patent history, we can't help but think about all the passion, grit, and dedication it took inventors and their counselors to get here.

For those of you not familiar with how patents came to be, here's a brief history lesson: On June 21, 1788, the Constitution of the United States was ratified by the last of the necessary states in order for it to take effect. This Constitution included a provision authorizing Congress "to promote the Progress of Science and useful Arts by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." Consequently, Congress adopted and President George Washington signed the first U.S. Patent Act, which went into effect on April 10, 1790. This Act empowered any two of the Secretary of State, the Secretary of War, and the Attorney General to grant patents to U.S. citizens for a term of up to 14 years for inventions that were deemed to be "sufficiently useful and important."

The first U.S. patent was issued on July 31, 1790, to Samuel Hopkins for "An Improvement In The Making Of Potash And Pearl Ash." The patent application filed by Hopkins was reviewed by Thomas Jefferson, Secretary of State, and Henry Knox, Secretary of War, who both signed the patent document along with President George Washington.

Within the first three years, Secretary Jefferson examined the applications for 55 patents that were granted. However, by 1793, the duties of presidential cabinet members left little time to devote to patent matters. Consequently, the original Patent Act was repealed and replaced by an Act that omitted the requirement that an invention be "sufficiently useful and important," and transferred responsibility for the handling of patent applications to a clerk in the State Department. This eliminated the "examination system" for patent applications and put a "registration system" in place.

### Highlights in U.S. Patent History:

On March 14, 1794, Eli Whitney received a patent for his "Cotton Gin."

On August 25, 1814, during the War of 1812, the British burned Washington, D.C. Dr. William Thornton, head of the Patent Office, managed to save the Office and its

People

David Hill

Practices

Patents

records from destruction by pleading with the British commander not to "burn what would be useful to all mankind."

On June 21, 1834, Cyrus McCormick received a patent for his "Improvement In Machines For Reaping Small Grain" (i.e., the McCormick reaper).

On February 25, 1836, Samuel Colt received a patent for his "Revolving Gun."

On July 4, 1836, the 1793 Patent Act was replaced by an Act that reestablished the "examination system" for patent applications and required that an inventor demonstrate that an invention be both novel and useful in order to obtain a patent.

Under the 1836 law, patents were numbered for the first time, and consequently, on July 13, 1836, U.S. Patent No. 1 was issued to John Ruggles for his "Locomotive Steam Engine For Rail And Other Roads."

On December 15, 1836, the Patent Office and virtually all of its records were destroyed by fire.

On June 20, 1840, U.S. Patent No. 1,647 was issued to Samuel Morse for his "Telegraph Signs" (i.e., the telegraph machine).

By an Act of August 29, 1842, the Congress authorized the granting of design patents for ornamental designs. Such patents would have a term of 7 years.

On November 9, 1842, U.S. Patent No. D1 was issued to George Bruce for his "Printing Types" (i.e., the first design patent).

On June 15, 1844, U.S. Patent No. 3,633 was issued to Charles Goodyear for his "Improvement In The Manner Of Preparing Fabrics Of Caoutchouc Or India-Rubber" (i.e., a method for vulcanizing rubber).

On September 10, 1846, U.S. Patent No. 4,750 was issued to Elias Howe for his "Improvement In Sewing Machines."

On March 3, 1849, the Patent Act of 1849 transferred the Patent Office from the State Department to the newly created Department of the Interior.

On April 10, 1849, U.S. Patent No. 6,281 was issued to Walter Hunt for his "Dress Pin" (i.e., the safety pin).

On May 22, 1849, U.S. Patent No. 6,469 was issued to Abraham Lincoln for "A Device For Buoying Vessels Over Shoals."

By an Act of February 5, 1859, Congress empowered the Patent Office to handle copyright matters. The Patent Office added a Librarian of Copyrights to its staff.

By an Act of March 2, 1861, Congress increased the term of a utility patent to 17 years and provided that the term of a design patent would be 3.5, 7, or 14 years, depending on the desire of (and the fee paid by) the applicant.

On November 4, 1862, U.S. Patent No. 36,836 was issued to Richard Gatling for his

"Improvement In Revolving Battery Guns" (i.e, the Gatling gun).

On June 23, 1868, U.S. Patent No. 79,265 was issued to Christopher Sholes for his "Typewriter."

On April 13, 1869, U.S. Patent No. 88,929 was issued to George Westinghouse for his "Improvement In Steam Power Brake Devices" (i.e., the Westinghouse Air Brake).

By an Act of July 8, 1870, Congress granted to the Patent Office the authority to register trademarks.

On December 19, 1871, U.S. Patent No. 121,992 was issued to Samuel Clemens (a.k.a. Mark Twain) for "An Improvement In Adjustable And Detachable Straps For Garments." In the inventor's book, *A Connecticut Yankee In King Arthur's Court*, the character "Sir Boss" states that "a country without a patent office and good patent laws is just a crab and can't travel anyway but sideways and backways."

On January 28, 1873, U.S. Patent No. 135,245 was issued to Louis Pasteur for his "Improvements In The Process Of Making Beer."

On November 24, 1874, U.S. Patent No. 157,124 was issued to Joseph Glidden for his "Improvement In Wire Fences" (i.e., barbed wire).

On March 7, 1876, U.S. Patent No. 174,465 was issued to Alexander Bell for "Telegraphy" (i.e., the telephone).

On February 19, 1878, U.S. Patent No. 200,521 was issued to Thomas Edison for his "Phonograph Or Speaking Machine."

On January 27, 1880, U.S. Patent No. 223,898 was issued to Thomas Edison for "An Electric Lamp For Giving Light By Incandescence."

On August 10, 1886, U.S. Patent No. 347,140 was issued to Elihu Thomson for his "Apparatus For Electrical Welding."

On May 1, 1888, U.S. Patent No. 382,280 was issued to Nikola Tesla for the "Electrical Transmission Of Power" (i.e., the induction motor).

On April 2, 1889, U.S. Patent No. 400,665 was issued to Charles Hall for the "Manufacture Of Aluminum" (i.e., the first economical process for extracting aluminum from its ores).

On December 22, 1891, U.S. Patent No. 465,588 was issued to Seth Wheeler for his "Toilet Paper Roll" (i.e., a toilet paper roll comprised of perforated sheets). The drawing for this patent clearly established that the proper way to hang a toilet paper roll permits the paper to be accessed from the front of the roll (i.e., over, and not under, the roll).

On August 29, 1893, U.S. Patent No. 504,038 was issued to Whitcomb Judson for his "Slide Fastener" (i.e., the zipper).

On July 13, 1897, U.S. Patent No. 586,193 was issued to Guglielmo Marconi for "New And Useful Improvements In transmitting Electrical Impulses And Signals" (i.e.,

wireless telegraphy).

On August 9, 1898, U.S. Patent No. 608,845 was issued to Rudolph Diesel for "New And Useful Improvements In Internal Combustion Engines."

On March 14, 1899, U.S. Patent No. 621,195 was issued to Ferdinand Zeppelin for "Improvements In And Relating To Navigable Balloons."

On November 5, 1901, U.S. Patent No. 686,046 was issued to Henry Ford for "New And Useful Improvements In Motor Carriages."

On May 22, 1906, U.S. Patent No. 821,393 was issued to Orville and Wilbur Wright for their "New And Useful Improvements In Flying Machines."

On August 8, 1911, U.S. Patent No. 1,000,000 was issued to Francis Holton for a "Vehicle Tire."

On March 1, 1921, U.S. Patent No. 1,370,316 was issued to Harry Houdini for his "Diver's Suit."

On November 20, 1923, U.S. Patent No. 1,475,024 was issued to Garrett Morgan for his "Traffic Signal" (i.e., the traffic light).

On April 1, 1925, the U.S. Patent Office was transferred from the Department of Interior to the Department of Commerce.

By an Act of May 23, 1930, Congress created the "Plant Patent" for asexually reproducible, non-tuber-propagated plants.

On November 11, 1930, U.S. Patent No. 1,781,541 was issued to Albert Einstein for "An Apparatus For Producing Refrigeration."

On August 18, 1931, U.S. Patent No. PP1 was issued to Henry Bosenberg for "A Climbing Rose" (the first plant patent).

On April 30, 1935, U.S. Patent No. 2,000,000 was issued to Joseph Ledwinka for a "Vehicle Wheel Construction."

On July 1, 1940, the responsibility for registration of copyrights was transferred from the U.S. Patent Office to the Library of Congress.

On August 11, 1942, U.S. Patent No. 2,292,387 was issued to Hedy Kiesler Markey (a.k.a. Hedy Lamarr) and George Antheil for their "Secret Communication System" (an anti-jamming device for radio-controlled torpedoes, using what Markey referred to as "frequency-hopping"). In 1962, the U.S. Navy began using an electronic version of this "frequency hopping" technology. Subsequent patents in frequency changing, which are generally unrelated to torpedo control, refer to the Markey/Antheil patent as the pioneering work in the field. Today "frequency hopping," or spread spectrum technology, provides the technical basis for cellular telephones and internet communications.

On September 12, 1960, U.S. Patent No. 3,000,000 was issued to Kenneth Eldredge for an "Automatic Reading System."

On January 2, 1975, the name of the U.S. Patent Office was changed to the U.S. Patent and Trademark Office.

On December 28, 1976, U.S. Patent No. 4,000,000 was issued to Robert Mendenhall for a "Process For Recycling Asphalt Aggregate Compositions."

On March 19, 1991, U.S. Patent No. 5,000,000 was issued to the University of Florida for "Ethanol Production By Escherichia Coli Strains."

On December 7, 1999, U.S. Patent No. 6,000,000 was issued to 3M Corporation for "Extendible Method And Apparatus For Synchronizing Multiple Files On Two Different Computer Systems."

On February 14, 2006, U.S. Patent No. 7,000,000 was issued to E.I. du Pont de Nemours and Company for "Polysaccharide Fibers."

On August 16, 2011, U.S. Patent No. 8,000,000 was issued to Second Sight Medical Products, Inc. for "Visual Prosthetics."

On March 16, 2013, the America Invents Act changed several provisions of U.S. patent law, including changing the term of a utility patent to begin on the date of issue and end 20 years after the effective filing date.

On April 7, 2015, U.S. Patent No. 9,000,000 was issued to WiperFill Holdings LLC for "Windshield Washer Conditioner."

On June 19, 2018, U.S. Patent No. 10,000,000 was issued to Raytheon Company for "Coherent Ladar Using Intra-Pixel Quadrature Detection."