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Do you want to know how innovators with different backgrounds come together to create new inventions and businesses? Are you ready to learn about tools and resources that can help you on your own road to success? If so, don't miss this free online webinar.



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BLACK INNOVATION AND ENTREPRENEURSHIP PROGRAM

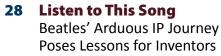
Also be sure to visit **www.uspto.gov/ blackinnovation** for information on the three-part
Black Innovation and Entrepreneurship series
February 10, 14, and 24, online and in person in
Baltimore, Maryland.



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Give no quarter to Patent Pirates.

Or they'll take every last penny.

Our ideas and innovations are precious. Yet Big Tech and other large corporations keep infringing on our patents, acting as Patent Pirates. As inventors, we need to protect each other. It's why we support the STRONGER Patents Act. Tell Congress and lawmakers to protect American inventors.



SaveTheInventor.com

Rising to the COVID Challenge

5 winners named for tech innovations to address pandemic BY KATHI VIDAL

T'S A PRIVILEGE to announce the five winners of the USPTO's Patents for Humanity: COVID-19 category competition. The awards recognize these innovators for their rapid response to the challenges of the COVID-19 pandemic through game-changing technologies.

This year's awards recognize innovators with a pending U.S. patent application or issued U.S. patent focused on inventions that track, prevent, diagnose, or treat COVID-19. The following winning innovations, which receive acceleration certificates to expedite select proceedings at the USPTO, went through two rounds of judging by experts based on two scoring criteria: the effectiveness of the technology to address COVID-19, and the technology's ultimate impact.

National Institute of Allergy and Infectious Diseases (NAID, Rockville, Maryland): NIAID, Scripps Research Institute, and Dartmouth College invented stabilized coronavirus spike proteins, which were essential to the development of the COVID-19 vaccines used today. The vaccines that incorporate these stabilized spike proteins have been instrumental in combatting the COVID-19 pandemic. The breakthrough came when NIAID scientists and their collaborators engineered coronavirus spike proteins that

mount effective responses against coronaviruses. This work cleared the path for the rapid development of the COVID-19 vaccines.

enables the human immune system to

Regeneron Pharmaceuticals (Tarrytown, New

York): Regeneron Pharmaceuticals developed a novel therapy to help treat and prevent COVID-19. The medicine, known as REGEN-COV® in the United States, consists of a combination of two monoclonal antibodies (casirivimab and imdevimab). It was the first to receive Emergency Use Authorization from the U.S. Food and Drug

Administration for the treatment of COVID-19.

Regeneron scientists developed the therapy for clinical trial use in five months and received the EUA in 10 months, moving from lab to patient in record time.

University of South Florida (USF, Tampa,

Florida): USF developed 3D-printed nasal swabs for when nasal swabs used in COVID tests were in short supply at the height of the pandemic. The USF Health Department of Radiology team and colleagues from the USF Health Department of Internal Medicine Infectious Diseases worked with Northwell Health, New York's leading health care provider, to create the initial design and prototype for a 3D-printed nasal swab.

Caron Products (Marietta, Ohio): Caron Products developed a decontamination chamber that was used to disinfect personal protective equipment when it was in short supply during the height of the pandemic. The Caron team developed a decontamination chamber that uses vaporized hydrogen peroxide (H2O2) technology to quickly kill pathogens on porous and non-porous surfaces, including PPDs.

Gilead Sciences Inc. (Foster City, California):

Gilead developed a widely effective antiviral medication used to treat COVID-19 known as remdesivir, one of the earliest COVID therapeutics.

Administered via injection, remdesivir works by blocking SARS-CoV-2 from reproducing in the body. It has been shown in clinical trials to help those with COVID-19 recover faster and reduce disease progression.

We hope these success stories serve as inspiration for more individuals to harness innovation for human progress, and in doing so, change the world for the better.

Kathi Vidal is under secretary of commerce for intellectual property and director of the USPTO.



TRADING CARD

NO. 5 Abraham Lincoln

BRAHAM LINCOLN did not invent the stovepipe hat, but he may as well have. No person in American history is better defined by that hat—the 7-to-8-inch mini-tower that men had been wearing since the early 1800s.

A story in *The Smithsonian* said reformer Carl Schurz recalled a first meeting with Lincoln in a railroad car in the 1850s, when he noticed the future president's hat was crumpled. Maybe Lincoln liked this because it jibed with his frontier image, but his wife apparently did not. In the 1918 play "Abraham Lincoln," her character said, "I've tried for years to make him buy a new hat."

Nonetheless, as America observes the 214th anniversary of Lincoln's birth this month (February 12) and Presidents Day on February 20, history tips its collective hat to the only U.S. chief executive to be granted a patent.

On May 22, 1849, Lincoln was granted U.S. Patent No. 6,469 for the device "Buoying Vessels Over Shoals" while home in Springfield, Illinois, practicing law. He applied for the patent just two months earlier and had begun work on it a year earlier, according to abrahamlincolnonline.org.

The idea was hatched between sessions of Congress when, on Lincoln's way home to Illinois, the boat he was on became stranded on a sandbar. According to a passenger's account, the captain ordered the hands to collect all loose planks, empty barrels and boxes and force them under the sides of the boat to buoy it up so it could swing clear of the sandbar.

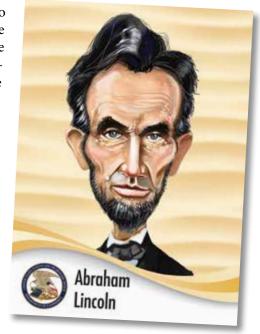
Lincoln set out to build an apparatus for this purpose. He created a scale model of his invention with the help of Walter Davis, a mechanic who provided tools and advice. However, it never drew enough interest to be sold commercially. (A replica of his scale model is at the Smithsonian Institution in Washington, D.C.)

What was wrong with Lincoln's invention?

The Journal of the Abraham Lincoln Association reported that the magazine Scientific

American pulled no punches: "We hope the author of it will have better success in presiding as Chief Magistrate over the people of the entire Union than he has had as an inventor in introducing his invention upon the western waters, for which it was specially designed."

The Journal basically described Lincoln's model as "a miniature boat with four exterior bellows—two per side—and a system of poles and ropes



that would extend and contract the bellows (or chambers)." It concluded the concept was "scientifically tenable," but "where Lincoln erred was in the execution, specifically his complicated system of poles and ropes that made it an invidious contraption. Lincoln should have devised a simpler and less intrusive means of inflating the bellows, the *Journal* said.

The man who freed the slaves was progressive and innovative. In 1863, he signed into law the National Academy of Sciences, by which the government investigates, examines, experiments, and reports on any subject of science or art. He created the Secret Service, which still exists today—although its original purpose was to fight rampant counterfeiting of U.S. currency.

The Secret Service Department of the Department of the Treasury was created on April 14, 1865. That evening, Lincoln attended the theater with his wife and was assassinated by actor John Wilkes Booth. He died the next day.

Requests for the USPTO trading cards can be sent to **education@uspto.gov**. You can also visit them at **uspto.gov/kids**.

What is a Patent Claim?

After your invention, your words in a patent application define the boundaries of your exclusive rights



You HAVE just invented something. You believe it is new, useful, solves a problem, and most important: It is yours. You invested time, money, and energy into this invention.

Now what?

If you want to protect your invention, you can apply for a patent with the United States Patent and Trademark Office. A patent grants an inventor the right to exclude others from making, using, offering for sale, selling, or importing the invention.

In other words, you have exclusive rights to your invention. No other person, corporation, or entity can use your invention or take credit for it. A patent has several parts—including drawings, a written description, and claims. The claims define in words the boundaries of your exclusive rights.

Claims are numbered sentences appearing at the end of the patent. Each claim is required to be one sentence with three different parts.

The first part is the preamble, which introduces the invention. Example: "An apparatus for sawing wood."

The preamble is followed by a transition phrase, such as "comprising" or "consisting of," that links the preamble to the body of the claim and indicates whether the claim is restricted to the listed elements or may cover additional non-listed elements.

NEWS FLASH

Udupa is New Commissioner for Patents

Nationally recognized leader has 20 years' experience in IP advisement, complex litigation



Vaishali Udupa, an intellectual property attorney, engineer, and top executive from Hewlett
Packard Enterprise, joined the 13,000-person Department of Commerce agency as

the new commissioner for patents on January 17.

The announcement was made by Kathi Vidal, under secretary of commerce for intellectual property and director of the U.S. Patent and Trademark Office.

The commissioner for patents is

a career position that oversees the agency's 10,000 Patents employees, including more than 9,000 patent examiners responsible for fostering the country's innovation system by providing patent protections to inventors as stated in Article I, Section 8 of the U.S. Constitution. She takes the reins of the Patents organization upon the retirement of Andrew Faile, acting commissioner for patents since January 2021, after more than 33 years at the agency.

A nationally recognized and dynamic leader with over 20 years of experience in strategic IP advisement and complex litigation, Udupa brings a wealth of experience to the agency in areas of patent prosecution and litigation, global IP policy, and diversity, equity, inclusion, and accessibility.

In the private sector, Udupa secured multiple IP trial wins and managed numerous IP cases to favorable resolutions in the United States and abroad. She assisted in the development of patent and trademark portfolios and counseled internal clients regarding licensing deals, asset acquisitions and agreements involving IP rights.

Before that, as an attorney in private practice, she participated in multiple IP trials and counseled clients with respect to their IP portfolios.



The transition phrase is followed by the body of the claim, which lists and describes the elements or limitations of the invention.

There are two types of claims: independent and dependent. Independent claims stand alone. Dependent claims refer to independent claims and further limit those independent claims by adding more elements or limitations to the invention.

Typically, a patent will have only a few independent claims and many dependent claims. There are five general types of claims. Depending on your invention, you can have a claim for a device, a machine, a chemical compound, a method or process for making something, or a method or process for doing something.

Claims should be grouped by type and preferably arranged in order of scope so that the first claim presented is the broadest (i.e., least restrictive). Additionally, all dependent claims should be grouped together with the claim or claims to which they refer to the extent practicable.

When you file a patent application at the United States Patent and Trademark Office, an examiner examines your claims by comparing them to prior patents or publications to see if your invention is entitled to protection. When drafting claims, it is important to strike a balance between a claim that is too narrow and may not fully protect your invention and a claim that is too broad and may not be allowed by the examiner.

For more information about claims and how to draft them, visit the USPTO's Manual of Patent Examining Procedure, Section 608.01at uspto.gov/web/offices/pac/mpep/s608.html#d0e44872.

NEWS FLASH

Explore Empowering Women's
Entrepreneurship (WE), a communityfocused, collaborative, and creative initiative
to encourage and empower more women
founders across America. Learn about protecting
your business, funding your startup, expanding
your network, and more. Part 1 of the three-part
Women's Entrepreneurship Symposium 2023
will be March 1 from 1 to 4:30 p.m. ET.

To sign up for alerts by email, visit **uspto.gov/ initiatives/we**.

WHAT'S NEXT

BLACK INNOVATION AND ENTREPRENEURSHIP: This year's program, which spotlights Black inventors and business personalities across the United States to showcase their legacy contributions to ingenuity and innovation, will be February 10 (2-4:30 p.m. ET), 14 (11 a.m.-1:30 p.m. ET) and 24 (2-4:30 p.m. ET).

All events will be virtual as well as in Baltimore, Maryland, at the Morgan State University Earl G. Graves School of Business and Management. Program events feature discussions with remarkable innovators; explorations of entrepreneurship; seminars focusing on

how to obtain and use intellectual property; and information about helpful USPTO resources.

BLACK INNOVATION AND ENTREPRENEURSHIP PROGRAM

For more information, visit uspto.gov/about-us/events/

black-innovation-and-entrepreneurship.

TOGETHER IN INNOVATION—AGRICULTURAL ADVANCES:

At this virtual February 28 presentation (3-4 p.m. ET), learn how innovators with different backgrounds come together to create new inventions and businesses, and discover tools and resources that can help you.

Special guests and expert panelists will cover how diverse teams are an essential part of a successful business strategy; challenges women innovators face and overcome in agricultural innovation; and valuable resources innovators can use to protect their intel-

lectual property and secure funding for their enterprises.

unding for their enterprises. For more information, visit



uspto.gov/about-us/events/ together-innovation-agricultural-advances.

EQUIP HQ: USPTO's new, web-based portal for K-12 educators and learners introduces intellectual property in creative ways. It offers STEM-based lesson plans to enhance student learning, creativity, and innovation. Learn more on February 28, from 6 to 7:30 p.m. ET, as Juan Valentin, an education program advisor at the USPTO, explains the genesis of the project.

For more information, visit **uspto.gov/about-us/events/ equip-hq-new-and-exciting-resource-learners-and-educators.**

Visit **uspto.gov/events** for many other opportunities to attend free virtual events and/or training.

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Our Mood Rings Are Turning Blue

If you're a regular reader of *Inventors Digest*, you know how committed we are to diversity among inventors. There's also much to be said for diversity among inventions.

That was a constant in the life of Robert Parker, who died in December at 86 in Tucson, Arizona.

Digital thermometers; the Duracell Battery Tester; even the Mood Ring—if Parker didn't invent it, he was a leader in their product development and/or marketing.

The aforementioned inventions all involved liquid crystal technologies, Parker's main specialty.

Liquid crystals' molecular makeup is not quite solid, not quite liquid. Their molecules are not ordered (sounds like some inventors). They were accidentally discovered in 1888 by Austrian botanist Friedrich Reinitzer while he studied cholesteryl benzoate of carrots.

Did you ever wonder how mood rings work? They contain thermotropic liquid crystals inside the stone of the ring band that show different colors at different temperatures when the wearer gets excited or emotional. (Yes, the ring also changes color after a workout or when near heat. And yes, for headline purposes we know that blue on a mood ring means peaceful, but Parker's daughter, Linda Hamilton, says Dad would have loved the play on words.)

Larry Udell, founder and chairman of the California Invention Center, got emotional when he learned he lost his friend of 40 years.

"He was a prolific inventor after he left Lawrence Livermore National Laboratory," Udell told me. "His worked with another dear friend of mine, Jim Fergason, the father of the Liquid Crystal Display or LCD (and holder of more than 100 patents)."

Parker launched Robert Parker Research in 1972 to commercialize and manufacture liquid crystal patented products. The company was the assignee on multiple patents. Parker was the named inventor on Digital thermometer and method of manufacturing (U.S. Patent No. 3,861,213A), and Battery tester and method for making the tester (Australian patent No. 5,773,686A). Some 80 patents bear his name.

Like many great inventors, he gave back to the discipline by teaching and inspiring others.

"He was an inspirational keynote speaker at a few of my inventor and entrepreneur workshops over the decades," Udell said. "I and the world will long remember his creative accomplishments."

> —Reid (reid.creager@inventorsdigest.com)

Inventors

EDITOR-IN-CHIEF REID CREAGER

> ART DIRECTOR **CARRIE BOYD**

CONTRIBUTORS

ELIZABETH BREEDLOVE LOUIS CARBONNEAU ADRIENNE KENDRICK **JACK LANDER JEREMY LOSAW APRIL MITCHELL EDIE TOLCHIN**

GRAPHIC DESIGNER JORGE ZEGARRA

INVENTORS DIGEST LLC

PUBLISHER LOUIS FOREMAN

WEBSITE ADMINISTRATOR ELIZABETH BREEDLOVE

FINANCIAL CONTROLLER DEBBIE MUENCH

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Déjà Vu as Fogerty Finally Gets CCR Publishing Rights

It has been widely reported that in 1969-70, **John Fogerty**-led Creedence Clearwater Revival sold more records than the Beatles. And just as Paul McCartney spent more than a half-

century trying to gain control of publishing rights for his group's songs, so did Fogerty.

And like McCartney, Fogerty has finally won. Billboard magazine was first to report that in January, Fogerty acquired a majority interest in the global publishing rights to his song catalog with the group—which includes "Proud Mary," "Fortunate Son," "Bad Moon Rising," "Up Around the Bend," "Have You Ever Seen Rain" and others-from Concord for an undisclosed amount.

There are even more Fogerty-McCartney parallels. Saul Zaentz was to Fogerty what Dick James was to McCartney.

CONTACT US

Letters:

Inventors Digest 520 Elliot Street Charlotte, NC 28202

Online:

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Zaentz, a film producer who won the Best Picture Oscar for three movies, was the owner of Fantasy Records when he signed the group in the mid-1960s. Fogerty ultimately determined the label misled him with bad investments and took his royalties.

Zaentz defended the deal as the two battled in court for decades. Fogerty avoided playing live any songs he had written with CCR because he did not want Zaentz to profit from his performances.

Concord acquired the CCR rights from Zaentz in 2004. Concord quickly reinstated and increased the royalties Fogerty had not received in roughly a quarter-century. The company retains the CCR master recordings and will continue to administer Fogerty's share of the publishing catalog for a limited time.

But Fogerty, who now owns control over 65 CCR copyrights, wrote on Twitter that "I have been waiting my entire career for this moment."

Some publishing rights would have reverted to Fogerty in a few years under U.S. copyright law's 56-year rule. But at 77, he apparently did not want to wait.

YIPES, STRIPES! ADIDAS LAWSUIT AGAINST FASHIONISTA FAILS

He arrived at Manhattan's Southern District Court on January 12, wearing a shorts suit and a sock with four stripes.

Nope, designer **Thom Browne** "is not Adidas," as his attorney, Robert Maldonado, said in his closing statement. The jury agreed after less than three hours of deliberations.

Adidas had sued Thom Browne in 2021, alleging the sportswear company's designs infringed on Adidas trademarks. Adidas, known for its threestripes logo, argued that Browne's products would confuse consumers "and deceive the public."

The sportswear company sought \$867,225 in damages and another

\$7 million for what it called ill-gotten profits.

Browne launched a three-striped design, the "Three-Bar Signature," around 2005. According to court documents, his fashion brand agreed to stop using the motif after Adidas contacted the label's then-CEO about the matter two years later. So designer Browne debuted a "Four-Bar Signature," a series of four stripes featured on clothing items.

Adidas also challenged the use of Thom Browne's "Grosgrain" Signature"—a red, white and blue design that the sportswear brand says consists of three stripes. But Browne said it contains five,

describing it as "white-red-whiteblue-white" in court papers.

Adidas said it will appeal the ruling. "We are disappointed with the verdict and will continue to vigilantly enforce our intellectual property, including filing any appropriate appeals," a spokesman said.



RIGHTIDEAS

Tactigon SKIN

STYLISH, 3D, WEARABLE MOUSE thetactigon.com

Tactigon SKIN features programmable gesture and voice control for your PC, PowerPoint, 3D CAD, gaming, robotics and more. It can be used as a mouse, touchpad or presenter.

The mouse comes with an artificial intelligence algorithm that helps improve gesture performance. The product is highly programmable using the Tactigon Gear software, so more advanced users can customize it to their needs. Tactigon SKIN can respond to natural hand movements and can recognize more than 48 gestures.

The T-SKIN Reload feature controls 3D modeling applications, PowerPoint presentations, VR and AR devices, robots, drones and game joypads.

The most recent retail price listed for the Tactigon SKIN was \$165.



SweatTent

PORTABLE, POWERFUL SAUNA sweattents.com

A traditional, wood-burning sauna, the 60-lb. SweatTent packs small and fits in your car trunk.

Its makers claim it takes just 3 minutes from unzipping to being fire lit due to the tent's QuickPop design that allows you to set up alone or with a partner. The stainless steel stove produces heat of 200-plus degrees Fahrenheit in less than 30 minutes.

SweatTent is made from two layers of durable, weather-proof Oxford 210D fabric, with a lightweight, powerful layer of insulation between.

As of this writing, the project team had a working demo, not the final product. Its ability to begin production may be affected by product development or financial challenges. The tent is to retail for \$1,499, with shipping to crowdfunding backers planned for May.

Funland

KIDS' MAGNETIC PLAY SPACE urbantoylab.com

Funland brings the playground indoors, enabling kids to explore and create with their parents inside and outside the home.

The product consists of a play couch made of 12 magnetic cushions in various fun shapes and one game accessory pack. The cushions, covered in luxurious fabric covers, automatically connect in any direction.

Kids can assemble them to form a fort, a rope tunnel, or set up games with their parents such as bucket ball, kerplunk and many others. The game pack consists of items including a crawl tube and collapsible bucket.

The Funland Couch Bundle will retail for \$339. Shipping for crowdfunding backers is set for April.





"Finding opportunity is a matter of believing it's there."—BARBARA CORCORAN



Dash Cam Omni

360-DEGREE, ROTATING VEHICLE SECURITY GUARD 70mai.com

The latest version of Dash Cam Omni adds new features for full-view coverage, AI parking surveillance and safe driving assistance.

Tech Advisor says the new 70mai Omni allows recording in every direction with wide-angle lenses. "It is the world's first dash cam that has a rotating lens which can turn to any angle to capture video."

Omni features 2-Phase Stepping Motors that provide smooth movement across 340 degrees, combined with a 140-degree FOV camera with minimized distortion. The company says these features result in the first 360-degree, no-blind-spot, full-view dash cam.

Shipping to crowdfunding backers is to be this month. The cam with 32G storage will retail for \$169, the 64G for \$184, the 128G for \$199.

Detectors as Protectors

THE SMOKE DETECTOR WAS INVENTED BY ACCIDENT, THANKS TO A COUPLE OF LIT CIGARETTE BY REID CREAGER

ITY THE POOR SMOKE DETECTOR. It's only trying to save lives. So when the thing starts beeping in our homes, why do we so often want to smash the bejeebers out of it?

Even the most memorable smoke detector scenes in movies and TV reflect this gruesome reality.

In "Rain Man," the character with Savant Syndrome played by Dustin Hoffman freaks out when the alarm goes off in the kitchen—and his brother, played by Tom Cruise, races in to bash the thing until it shuts up. Larry David tops that in "Curb Your Enthusiasm" when he tries to rip apart the bleeping beeping device after it wakes him up, clubs it off the wall only to find it still beeping when it falls to the floor, then completes his clubbing clownery with old-man gusto.

These willfully intentional acts of savagery are ironic, because the invention of these devices that have saved countless people was an accident.

No matter who deserves credit as the actual inventor.

Moving the meter

It was Walter Jaeger or Duane Pearsall. Take your pick. (Some sources say the first smoke detector was invented by George Andrew Darby of Birmingham, England. But his 1902 patent description in GB190225805A, "An Electric Heat-indicator and Fire-alarm," makes no reference to smoke.)

According to the United States Nuclear Regulatory Commission (USNRC), Jaeger, a Swiss physicist, was working on a sensor for detecting poison gas in the late 1930s. Frustrated when it failed to register for even small amounts of gas, he didn't beat it up. He lit a cigarette and the smoke moved the meter on his gadget.

This discovery eventually paved the way for the Atomic Energy Commission granting the first license to distribute smoke detectors using radioactive material in 1963. These were used mainly in factories, public buildings and warehouses.

Pearsall is known as the inventor of the battery-powered home smoke detector—a distinction sometimes lost in our internet age of misinformation.

Like Jaeger, he made his discovery by accident. Also like Jaeger, he was helped by a lit cigarette.

According to *University of Denver* magazine, Pearsall (a U-D alumnus) was interested in the control of static electricity. He began manufacturing static neutralizers for photographic dark rooms.

His wife, Marjorie Pearsall, told the magazine that during a mid-Sixties test to measure the relative efficiency of the product—the concentration of ions—her husband noticed whenever his assistant lit a cigarette or exhaled smoke, the instrument showed "erratic changes."

"This was the crude beginning of the batterypowered home smoke detector Duane introduced to the market in 1970—and probably one of the best things ever to come from cigarette smoking," Marjorie Pearsall said.

Technological triumph

Today's smoke detectors are triggered by particles in the air. They use two types of technologies, according to the National Institute of Standards and Technology.

Ionization detectors use a small portion of safely shielded, radioactive material that electrically charges, or ionizes, air molecules between two metal plates. This produces a small electric current flowing from one plate to the other in the air.

When particles enter the chamber, they attract the ions and carry them away, reducing current. When the number of particles entering



Duane Pearsall founded Statitrol, a company to sell heating and ventilation equipment. In 1963, after one of his assistants' cigarette smoke caused dramatic changes in an ionization detector, the company began creating a smoke detector. Rival BRK's first battery-operated smoke detector for residential use was released in 1976.

Water Jaeger (late 1930s) and Duane Pearsall (mid-1960s) both made discoveries that continue to save the lives of countless people around the world.

the chamber is enough to reduce that current below a certain amount, the device registers those particles as smoke and the alarm sounds.

(Don't let the word "radioactive" be cause for alarm, pun intended. According to the USNRC, most units sold today use one microcurie or less of americium-241, which is less than the average amount of radiation to which a person is exposed.)

The other type of commonly used detection technology, called photoelectric, works by detecting light that is reflected off particles from a light beam inside the sensing chamber. When no particles are present in the sensing chamber, the light from the beam does not strike the light detector. When particles are present and the amount of light registered by the light detector reaches a certain threshold, the alarm sounds.

This technology is most impressive in its results, not in how it operates.

The United States Fire Administration reports that you cut your risk of dying in a home fire in half if you have working smoke alarms. The National Institute of Standards and Technology says that if every home in the United States had a working smoke alarm, deaths by home fires would drop by 36 percent.

As it pertains to the importance of smoke alarms, you can't beat that with a stick, a bat, or anything else. €

INVENTOR ARCHIVES: FEBRUARY

Feb. 11, 1934: Mary Quant, an English fashion designer who is credited with inventing the miniskirt, was born.

Quant opened a retail boutique, Bazaar, in London in 1955. Among the clothes she made herself were knee-high, white, patent plastic,

> lace-up boots and tight, skinny rib sweaters in stripes and bold checks, which came to epitomize the "London look." She denies inventing the miniskirt, saying that was the idea of girls who visited her shop.

Quant received her Order of the British Empire for her contribution to the fashion industry in 1966. In 2000, she resigned as director of Mary Quant LTD, her cosmetics company, after a Japanese buyout. She still sells cosmetics at maryquant.co.uk.



Writing Your Own **Patent Application**

FOLLOW THESE THREE REQUIREMENTS FOR PATENTABILITY WHEN WRITING CLAIMS BY JACK LANDER

■ **HE COST** of preparing, filing, and prosecuting a patent application is \$10,000 to \$15,000, according to an AI service I just interrogated. Most inventors I know don't have this kind of money. This leaves two options: Abandon your hopes for a patent, or write the application yourself.

A patent is a simple document—mainly a precise description of your invention, including drawings. Part of that description is set out as "claims," which are statements that emphasize the essential legal features of your invention that you believe to be novel.

The difficult part about writing claims is wording them so they pass the critical eyes of the patent examiner at the U.S. Patent and Trademark Office. Requirements for patentability are that your invention:

- Must not be known already to the public.
- Be nonobvious to a person skilled in the art.
- Will be useful. Let's examine these aspects.

When you assume ...

The first item above is usually thought of as your invention compared to previously patented inventions. From this assumption, we determine that we must search the patent files for similar inventions.

It is possible to do your own search, but this is not as easy as it might seem. If you try on your own, I strongly urge you to first get a copy of "Nolo's Patents for Beginners" by attorneys David Pressman and Richard Stim.

You may already know a bit about patenting, but don't let the title tempt you to bypass this book. it is a treasure for the beginner as well as the advanced inventor.

I emphasize that the first requirement states "known already to the public." This means that products on the market, or those that have been on the market and no longer are commonly available, constitute prior art.

For example, my mother's second husband invented a lampshade mounting device to keep the shade centered on the body of the lamp. He hired a patent attorney to write and file the application.

He was awarded the patent. When he called on a lamp manufacturer to license his patent, he was told, "That's not new. We've been using that idea for years."

The searcher hadn't investigated products already in use, but it would have been clear that the invention was known to the public. In fact, there are at least four sources that the patent examiner should refer to in his or her examination: Issued patents in the United States; issued patents in other countries; products for sale in anywhere in the world; products that were sold in the past anywhere in the world but are no longer popular.

In other words, to proceed with a new application, the inventor should be aware of an invention identical to his or her own that has been revealed on paper or physically as a prototype or product anywhere in the past. Failure to discover such forms can invalidate your issued patent if such a form is revealed as a challenge to the novelty of your patent at any time after it is issued.

In practice, I believe that only the first two sources are researched by the most (maybe all) patent examiners. In any case, if you want full protection from unrevealed prior art, you've got to investigate the third and fourth items on your own.



A quick word about the other two aspects:

Nonobvious means not obvious to someone skilled in the art. Suppose you invent a novel bicycle brake. The person who may be qualified to act as someone skilled in the art might be a seasoned bicycle mechanic. Such person would have to testify that he or she had never come across such a device as the subject novel brake.

In the case of my mother's second husband's lampshade invention, a manufacturer of lamps said the invention wasn't novel because it used formed wire in the configuration shown in the patent drawing. The "invention" obviously failed the nonobviousness test.

If an invention is sold to the public without any extreme incentives or pressure, it is useful.

Some good news

If you have complied with the three basic requirements above, your next step will be to search the U.S. patent files. I find google.com/patents is an easy site to use.

In any event, you won't find foreign patents on the Google site or U.S. Patent and Trademark Office site. The USPTO announced a new search site on Feb. 1, 2022, but this does not include foreign patents as far as I can determine.

However, WIPO—the World Intellectual Property Organization—has a database titled PATENTSCOPE that provides access to foreign

patent applications and patents. I haven't used this site, so I can't say anything about ease of use and so on.

Searching is not as easy as using the dictionary. Again, I recommend "Patents for Beginners" as an introduction to the search.

Also, Pressman's book, "Patent It Yourself," has excellent, all-around information on searching and writing a patent. I highly recommend it after you have dog-eared several pages of the Pressman co-authored "Patents for Beginners."

Some good news: You don't have to do a perfect job of searching in order to file your patent application. Whatever patents that you don't find that are critical to your application will be found by the patent examiner.

I wouldn't send in an application without arguing that my invention is unlike the Joneses' U.S. Patent No. 10,123,456 in the following way, and with references to several other patent numbers from my search. The reason is that if you show the patent examiner that you are trying to make his or her life easier, you may have a better chance for help on the phone if you have questions.

More good news. It isn't difficult to find a professional patent searcher who will do the search for a reasonable fee. Check the ads in this magazine first.

Another source is any inventors club. Google should be helpful in finding one.





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For more information, see our website or email us at info@inventorsdigest.com.

Be very skeptical about SEARCH inventor help organizations, especially those that advertise nationally. They'll try to talk you into a "package" that includes marketing, which costs several thousand dollars. I've never known of even one that knew anything about licensing a patent.

Help with writing claims

OK, say your search is done and you haven't found anything that looks like your invention. What's next is to write the application.

The best way to start is to read the two books I've recommended and then read several recently issued patents.

The claims will always be the last section of the patent. And claims are the absolute most important part of your writing. Pressman will instruct you on how to write claims.

I once asked a good patent attorney how long it took him to become an expert claims writer; he said 10 years. So, don't start bragging to your friends about having written your own claims until your patent issues, and the examiner has allowed your claims as you originally wrote them.

Now, a confession.

I've written and filed four patent application over the years, and three were rejected because the patent examiner found prior art I overlooked in doing my own search. When I finally succeeded in getting the fourth application through and issued, my claims had been limited to one trivial feature that most likely would not entice a licensee.

It's a cruel world, but we must keep trying.

I suggest you write your first patent application for an invention that won't break your heart if it is rejected. That will increase your chances of success when your application covers the invention you are sure will be a winner. �

Jack Lander, a near legend in the inventing community, has been writing for Inventors Digest for nearly a quartercentury. His latest book is "Hire Yourself: The Startup Alternative." You can reach him at jack@Inventor-mentor.com.





HOW WE DO IT







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We've helped bring more than 2,500 products to market. Is yours next?



How to Grow **Your Email List**

YOU CAN USE FACEBOOK IN 3 WAYS TO BUILD SUBSCRIBERS, AT NO COST BY ELIZABETH BREEDLOVE

QUALIFIED, well-built email list is often more impactful than a much larger social media audience.

Your email list gives you the opportunity to reach out directly to those who have already expressed a deeper level of interest in your business, product or invention by giving you their contact info. Handing over an email address is a bigger commitment than simply hitting a "follow" button, so you can safely assume that an organically grown (i.e., not purchased) list of email subscribers is interested in what you offer.

That's not to say that growing a large social media presence isn't important. Your social media audience can be an integral part of your company's growth when you use your social platforms strategically.

In fact, social networks such as Facebook can provide a great path for naturally building an email list of engaged subscribers likely to open marketing emails and click through to your site.

Easy as 1-2-3

Here are three ways to use Facebook to grow your email list at no cost, without the need for paid advertising.

Ask for sign-ups with an action button. Utilizing this is an easy way to encourage email subscribers.

Have you ever noticed a blue button in the top right of a Facebook page that says something such as "Contact Us" or "Book Now" or "View Shop"? This is the page's action button, which the page's owners can set to one of a select few calls to action.

If you aren't using your action button to drive sales or for another important purpose, set it to "Sign Up," and enter the URL for a landing page where those who click through can subscribe to your email list. This button is a great way to

passively drive email sign-ups from your company's Facebook page.

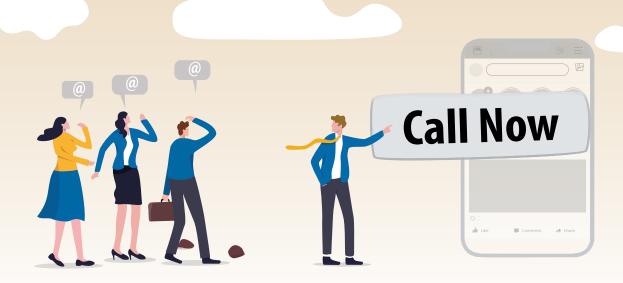
Encourage sign-ups elsewhere on your Facebook page. If you're using your action button for a different type of call to action, such as to drive sales, you should still be driving subscriptions on your Facebook page. Add a link to your website in your page's Intro and About sections, and make sure it's easy for someone to join your email list as soon as he or she clicks the link.

For example, you could link directly to a landing page that encourages email sign-ups, or you could add a pop-up email sign-up form. A pop-up asking for email addresses is almost always a wise strategy, as it gives anyone who visits your site an opportunity to opt in to your email list regardless of whether they come from Facebook, another social network, or somewhere else.

Use Facebook posts to promote lead magnets. As you post to your company's Facebook page, look for opportunities to add links to your organic posts that encourage sign-ups. You'll need something to incentivize sign-ups; ideally, you have something to offer in exchange for subscribing to your email list.

This is often called a lead magnet. It can be a discount, a free gift with purchase, or a downloadable freebie or resource. Your lead magnet shouldn't be widely available but should only be given to those willing to subscribe to your emails.

Once you determine your lead magnet, automate it so the subscriber receives it immediately upon signing up. Typically, this looks like an automated welcome email containing a promo code or a link to download some sort of content or resource. Make sure this email is sent out within a few minutes of a sign-up: You want to engage with people right away, so they don't have time to forget about you and what you offer.



Use your action button. Encourage sign-ups elsewhere on your page. Promote lead magnets.

Once you've determined your lead magnet and set up an automatic process to distribute it to subscribers, you can begin to tease it on Facebook and your other social platforms by sharing the link where people can subscribe to your email list.

Organic, unpaid Facebook posts are a great way to highlight your offer. Just write a short post encouraging your followers to sign up for your email list to receive a discount or freebie and be sure to include the link and a relevant image.

Experimental alternatives

At times, the Facebook algorithm seems to devalue content containing external URLs. If you find you aren't getting many new subscriptions through these types of posts, experiment with placing the link in the post's comments instead along with a note in the caption encouraging people to click the link in the comments.

If you're still struggling to get new subscribers through organic Facebook posts, you may need further experimenting to find the approach that works best for your audience. Meta's Business Suite's A/B Test feature allows you to compare two or more options, such as what sort of incentive to advertise or how to ask for sign-ups in your posts.

If you're interested in a less common approach that lets you interact more intimately with your email subscribers, you can present the offer but ask your audience to comment if they are

interested in your lead magnet (rather than sending them to your website). When someone comments, reply with a quick, friendly direct message with the link to sign up.

This strategy can work well by creating engagement on your posts. It also gives you an opportunity to interact with your audience more individually than in the comments section.

Lastly, you may find yourself in need of quick email list growth for something such as a new product launch. In this case, consider upping the ante with an even better lead magnet for a limited time.

For example, you could host a giveaway or contest for all subscribers and encourage your audience to sign up for your emails to be entered to win. This doesn't necessarily have to be a huge, extravagant prize. For a new product launch, for example, you could consider giving away the new product to a few of your email list subscribers on the day it launches.

Ultimately, with a well-rounded approach to passively and actively gathering new email subscriptions, your Facebook page can provide fertile ground for growing a healthy email list. ♥

Elizabeth Breedlove is a freelance marketing consultant and copywriter. She has helped start-ups and small businesses launch new products and inventions via social media, blogging, email marketing and more.



There's Relief **Afoot**

MAN'S PLANTAR FASCIITIS SLIDES FOCUS ON ENDING THE PAIN. NOT JUST SOOTHING IT BY JEREMY LOSAW

HEN RICH RHODES was diagnosed with plantar fasciitis, he thought it was the end of his athletic lifestyle. Instead, it was the first step in a journey to develop slides to help himself and others treat this painful condition.

Plantar fasciitis is characterized by inflammation of the tissue that runs across the bottom of each foot from the heel to the toes. This results in chronic heel pain that can affect how one walks. It is particularly frustrating because it can develop without an obvious cause.

Many devices can help treat plantar fasciitis once diagnosed. A person can spend hundreds of dollars experimenting with different therapies.

Rhodes' PushPül slides are one of the few products focused on prevention as well as treatment.

The slides are sandals with special features in the footbed to help prevent and provide treatment for plantar fasciitis. The core feature is the massage ball in the heel, modeled from the lacrosse ball treatments typically used.

A raised arch support provides a light stretch, and a mid-foot pad lightly spreads apart toes to help mitigate nerve entrapment. A cushioned toe bed reduces impact.

> The combination of these elements results in a slide that is comfortable to wear for everyday use while combating and treating

> > plantar fasciitis' effects.

Changing the landscape

Now a brand strategy adviser based in the New York City area, Rhodes was working as a producer at ESPN's SportsCenter when he was diagnosed. He worked nights and was an active athlete during the day, playing lots of soccer and golf.

After the foot pain began, he contacted his brother, a foot and ankle surgeon. His brother confirmed he had plantar fasciitis and gave him a box full of different products to treat it.

Rhodes dutifully tried them all but was still frustrated.

"After a couple of weeks, I said to my brother, 'There's got to be a better way. How do I prevent this from happening again?"" he said. The answer was not helpful; his brother told him to just be careful and stretch his calves.

Rhodes realized that virtually the whole industry around plantar fasciitis was focused on treatment, not prevention. He saw an opportunity to change that.

"As a soccer player, I am wearing slides all the time," he said. "There has got to be a way to proactively train my feet to not have this problem.

"I wanted to invent something that would help you beat it."

His innovation was to take currently used plantar fasciitis treatments and put them directly into a slide. This would allow people to get these therapies organically while walking around doing their everyday activities.





Rhodes did not know much about product development. Still, he was resourceful and motivated.

He had a friend who worked with shoe adhesives and had contacts for shoe manufacturers in Vietnam that could make prototypes. All he needed was a CAD file of what he wanted.

He used a product testing platform called Mesh01 to outsource the design. He shared some photos and inspiration to initiate a design competition on the site; a designer from Japan came up with a concept he liked the best. This concept was then shared with a footwear design firm called Proof of Concept in Washington state, which used it to build a CAD file that a Vietnamese factory used to make the first prototypes.

Now it was time to take the slides into the community to see how people liked them.

Rhodes had a short run of the slides made and gave away hundreds of pairs at athletic events such as triathlons and distance running events. He got key feedback from would-be purchasers and found that the testers were feeling immediate relief.

One triathlete became obsessed with them and started wearing them every day. It was validation that he was on the right path.

Strong signs, strong challenges

The technology behind PushPül is currently patent pending. Rhodes initially did not think it was possible to patent the product because he thought the technology was too obvious. However, his attorney assured him that it was novel and patentable to combine the elements of the design in the way he did.

Rhodes feels the patent has legitimized the product, but he understands that building a great product and having a compelling brand will be key to long-term success.

PushPül was launched on Kickstarter in the fourth quarter of 2022. It had modest success, with almost 100 backers and \$7,252 raised.



Rhodes felt that his product was a difficult one for the Kickstarter market because it is so visceral; it sells better when people try them on. Being a sized product is tricky as well, because some people purposely buy slides that are offsize to wear with socks or for a different fit. He was still able to generate some presales and get feedback from a wider community than his local athletes allowed.

The next step for PushPül is to figure out the manufacturing pathway. Rhodes not only has to fulfill Kickstarter backers, he needs product to make a concerted push into the market. Unfortunately, the original factory that made his first prototypes shut down because the owner died from COVID complications.

As he works to find a new manufacturing partner, he realizes it is difficult to find quality production at low order quantities. Once Rhodes has more slides in hand, he will be ready to attend trade shows and lay the groundwork for having more people try them on. €

Details: pushpul.com

Jeremy Losaw is the engineering director at Enventys Partners, leading product development programs from napkin sketch to production. He also runs innovation training sessions all over the world: wearewily.com/international



Family-first First Aid

MOTHER'S KIT PROVIDES HIGH-QUALITY MEDICAL ITEMS IN AN ORGANIZED WAY BY EDITH G. TOLCHIN

■ **VER SINCE** I became a "Bubbie" to Joshua 2 1/2 years ago, I've had my eye out for new products that might help him or his parents. I stumbled upon the "Keep>Going First Aid" line and was hooked!

The kits, invented by Antje Pepper of Orlando, Florida, with help from her family, are attractive, sturdy and helpful for boo-boos while on the go, The inventors have a great story as well.

Edith G. Tolchin (EGT): Please tell us about your background(s) and how the line of Keep>Going First Aid products came about.

> Antje Pepper (AP): My husband and I were lucky enough to travel the world with our children for a couple of years. Throughout this adventure, it became apparent (many times over) just how crucial it is to carry a fully stocked first aid kit, especially as a family.

However, we quickly realized that the first aid kit industry simply didn't cater to familiesespecially moms or children-even though cuts, bumps, bruises and general minor injuries happen all the time with kids.

We carried our ugly and unorganized first aid kit—that we had to make ourselves—throughout our journey, and kept note of all the items it was missing as well as the obvious design flaws. As soon as we returned home, we got to work designing a first aid kit that was organized and specially made for families, with a design that moms would be proud to tote around. We were



EGT: Are there any special features?

ready to shake up the first aid kit industry!

AP: One of the most noticeable features of our bags is the unique pattern design choices. We also made it a point to organize the supplies so

they can be found quickly, using our patentpending bag organization design. Our first aid kits are packed with a wide range of high-quality medical items that families are likely to need in real-life and day-to-day situations.

Practical items such as metal tweezers, nosebleed plugs and tick removal tools are ready to help parents save the day. We know from firsthand experience how traumatizing these minor injuries can be for children—which is why we also included colorful bandages and fun stickers to distract and lighten the mood.

EGT: How was the prototyping process handled? Was it difficult to get exactly what you wanted, and did it take a long time before you were ready to start selling?

AP: Once we nailed down our idea, we sketched out the design of the bag. We were determined to reduce the bulk that comes with ordinary first aid kits. We developed the idea of pages with pockets that are customized to specifically fit the medical tools and items we included in the kit.

We brought our sketch to a local seamstress here in Orlando. She also happens to be an inventor herself, so she was the perfect choice. She understood our vision right away and developed a prototype in no time, which helped us see our first product come to life.

EGT: Did you have any difficulty starting a new business?

AP: We are not new to entrepreneurship, but that doesn't mean we had a foolproof formula to follow. I have a background in marketing and we both know how to run a successful business, but product-based e-commerce added a new layer of complexity.

Luckily, knowledge and resources were abundant in this area of entrepreneurship. We leaned heavily into online mastermind groups, Shopify tutorials, and other resources whenever we needed help or weren't sure about the next step in our process. There are so many knowledgeable business owners who want to help!

EGT: From where are you selling?

AP: Currently, most of our sales are made directly on our e-commerce website. We've also recently started selling our first aid kits on Amazon.

EGT: Are you manufacturing in the United States or overseas, and how has that gone?

AP: When we started, we were manufacturing our bags overseas and packing them full of first aid supplies here in the United States. However, now the full production is completed overseas. We explored a full domestic production but couldn't make it work economically.

Overall, we've had a good experience with manufacturing and don't necessarily have any horror stories or cautionary tales.

EGT: What has been your biggest obstacle in product development?

AP: Hands down, long lead times. Each one of our first aid kits includes a plethora of items, so you can only imagine the number of moving parts that go into developing each product. For example, one manufacturer creates our bags while another produces the custom bandages—and yet another packs the kits for us. In total, there are more than 10 different factories that have to be coordinated.

All of this must be completed before one product can ship. While this makes product development stressful, overall we've had a good experience with our factories and manufacturers so far.



EGT: Have you had any difficulties in supply chain or logistics with COVID-19?

AP: Yes! Since we were still a relatively small business during the pandemic, we were obviously requesting smaller quantities of product than the larger corporations.

Manufacturers and shipping companies were pushing us to the back of the line since our quantities were smaller. Big corporations requesting in-demand medical supplies were given priority by our manufacturers.

Also, shipping costs and ocean carrier delays increased during the pandemic due to the spike of consumer product demand, resulting in outof-stock situations for us.

EGT: Are any of your products patented and if so, what intellectual property advice do you have?

AP: First aid kits have been in existence for over 130 years, so we can't necessarily apply for a patent on a kit. However, we do have a utility patent pending for the unique way we've

designed and organized the supplies in our bags.

We suggest hiring a patent attorney to properly navigate the process. While it has been costly, we feel it's extremely important to protect your brand and intellectual property.

EGT: What advice have you for new inventors?

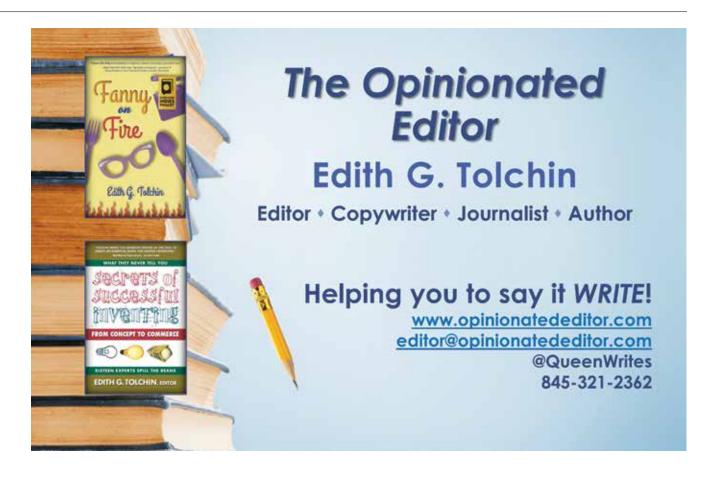
AP: One of the reasons I feel Keep>Going First Aid is so successful is because we took our time to research the market and measure potential consumer demand.

As an inventor, it's so important to ensure that what you're working on isn't just something you want, but something other people will also want. Ensuring there's a market fit for your product is a vital key to success. ♥

Details: keepgoingfirstaid.com

Edith G Tolchin has written for Inventors Digest since 2000. She is an editor (opinionatededitor. com/testimonials), writer (edietolchin.com), and has specialized in China manufacturing since 1990 (egtglobaltrading.com).





Climb Charts

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BEATLES' NORTHERN SONGS/MICHAEL JACKSON MISADVENTURES ARE A LESSON FOR ALL WHO WANT TO PROTECT THEIR CREATIVE WORKS

BY REID CREAGER

■ IXTY YEARS AGO this month, Paul McCartney and John Lennon met with a music publisher, an attorney and Beatles manager Brian Epstein at Epstein's Liverpool home. Little did McCartney and Lennon realize they were getting a ticket to ride replete with misery.

When the Beatles songwriting team signed an agreement on the morning of Feb. 22, 1963, accepting part ownership in a new company called Northern Songs, it marked the formal beginning of an intellectual property odyssey and wicked education for a group of naive young men. Their journey can help educate anyone interested in protecting creative rights today.

Bruce Berman, chairman of the Center for Intellectual Property Understanding and CEO of Brody Berman Associates, reminds us that "The music publishing difficulties of the Beatles and other recording artists are well documented. Bad early publishing deals have been standard practice in the music industry since before rock 'n' roll."

Of course, the Beatles likely would have become rich no matter who handled their business affairs, or how. But the fact that the most successful music group of all time was victimized, its members often making uninformed assumptions and choices, makes for a compelling cautionary tale.

Only a Northern Song

The Northern Songs deal seemed logical, even attractive, at the time: The fledgling group fancied better promotion of their records after their first 45, "Love Me Do," stalled in part due to lack of publicity by EMI's Ardmore & Beechwood publishing company.

Music publisher Dick James—a former singer once produced by now-Beatles producer George Martin—seemed a good choice to not only get better play for the group's second 45, "Please Please Me," but to get major artists to record Beatles songs and boost their royalties (both accomplished).

According to the Brow Beat blog on slate. com, Martin gave Epstein three candidates to become the group's music publisher (adding a good word about James). Then fate intervened when one of the candidates was 20 minutes late for a meeting with Epstein.

He left and showed up early at the office of James—bald, bespectacled and little known in his current line of employ. Epstein played an acetate of "Please Please Me" for James.

Brow Beat reports: "Right in front of Epstein, James called his former producer Philip Jones, who had fortuitously taken over one of Britain's

On Feb. 22, 1963, a year before they came to America, the Beatles entered into a music publishing contract that began with promise but soon haunted them financially and professionally with lasting impacts on Paul McCartney for more than a half-century. This must have seemed irresistible to Epstein, who 13 months earlier had signed a five-year contract to be the Beatles' manager despite having no experience in that capacity. Representing a talented but inexperienced group, he needed James as much as James needed him.

"As a music producer friend tells me, it's all about leverage," Berman said. "Early in their careers, the Beatles had none.

"Artists like them were lucky to get a meeting with a publisher or record label, let alone control their copyrights. Those starting out in product or brand licensing are faced with similar obstacles."

"Please Please Me" was a smash hit. A sea of chart-topping singles and albums ensued, making the Beatles millionaires almost overnight. Their "invasion" of America on Feb. 7, 1964, launched a worldwide music phenomenon that lives to this day. Singers ranging from Herb Alpert to Petula Clark to Ella Fitzgerald rushed to record Beatles songs within the first

year under James, who soon

was also publishing Gerry and





The Beatles owned no known patents, according to David Davis, a research consultant at copyright.com. But he informed *Inventors Digest* of a key musical innovation, little known to many Beatles followers, which was the subject of a patent application.

When bassist Stuart Sutcliffe left the group in 1961, Paul McCartney had to replace him. And find a bass.

The 18-year-old McCartney, who could not afford a Fender bass, took a liking to the Höfner 500/1 (also referred to as a violin bass because of its shape). The German company had begun producing the instrument in the late 1950s.

McCartney's loyalty to the instrument is evidenced by the fact that, according to *Guitar World*, he is seen using a '61 and '63 version of the bass during the "Get Back" sessions in 1969. Not surprisingly, the Höfner 500/1 is often referred to as the Beatles Bass.

"It was just a

the Pacemakers, Herman's Hermits, the Troggs and many more.

So why is the Northern Songs saga generally seen as disastrous?

It would take decades for the full effect to stomp one Beatle in particular.

Ticket to ride

"John and I were taken for a ride. No doubt about it," McCartney said in a 2005 interview with *Mojo* magazine.

"We were in a little mews in Liverpool one morning and there was this lawyer (Charles Silver), who we later found out was sort of ours. He didn't look like ours, and he certainly didn't do a deal like he was ours."

But with full trust in Epstein's business acumen, neither McCartney nor Lennon read the contract.

There are varying accounts of the original deal's details, but the headline is that Lennon and McCartney each had a roughly 20 percent ownership in Northern Songs. Dick James Music (James and Silver) owned 51 percent; Epstein's company, NEMS Enterprises, 9-10 percent.

Epstein and James were named directors of the company. McCartney and Lennon were not. George Harrison and Ringo Starr had no



controlling interest, though the company published their songs and they received royalties.

In his 1997 book "Many Years From Now," McCartney said: "There was always this voting share that could beat us. We could only muster 49; they could muster 51. They could always beat us."

The agreement was mostly about leveraging the Lennon-McCartney songwriting team: In fact, Inventors Digest could find no mention of Harrison or Starr attending the fateful meeting at Epstein's home.

"We'd signed the whole thing away one morning before getting on a train and we didn't understand what it was," McCartney told Mojo. "Later, when we tried to readjust it, the publisher said, 'I can't.'

"I know now through having a publishing company [MPL Communications] that you can, at any point. So in other words, yeah, we were signed to a slave contract."

Lennon reportedly said James "carved Brian (Epstein) up." A frustrated Harrison turned the experience into a Beatles song.

"I realized Dick James had conned me out of the copyrights for my own songs by offering to become my publisher," Harrison said in a 1999 Billboard magazine interview. "As an 18- or 19-year-old kid, I thought, 'Great, somebody's

gonna publish my songs!' But he never said, 'And incidentally, when you sign this document here, you're assigning me the ownership of the songs, which is what it is.

"It was just a blatant theft. By the time I realized what had happened, when they were going public and making all this money out of this catalogue, I wrote 'Only A Northern Song' ... just to have a joke about it."

Extra frustrating for Harrison was the fact that in late 1964, he had the vision to start his own music publishing company, Harrisongs. But he had agreed to give Northern Songs publishing rights to his songs in a three-year deal in 1965 the year the company went public on the London Stock Exchange to help reduce the tax burden and had to wait until that contract expired in 1968. (Starr followed the same course, launching Startling Music the same year.)

You can't do that!

McCartney and Lennon met with James at Apple Records in 1968 to try to renegotiate their deal, which through past extensions bound them to Northeren Songs until 1973. According to The Paul McCartney Project, this abject failure shifted a cold relationship to frosty.

'COME TOGETHER'—NO

John Lennon and music publishing company owner Morris Levy played battling lawsuits beginning in 1969, when Lennon was the defendant in a copyright infringement claim over the Beatles' 1969 song "Come Together."

Levy's Big Seven Music was the publisher of Chuck Berry's song, "You Can't Catch Me." The first line of "Come Together" ("Here come ol" flattop, he come groovin' up slowly") clearly borrows from a line in Berry's song, and the music on the Beatles' hit is arguably a slowed-down version of the Berry song.

The case was settled out of court in 1973, with the proviso that Lennon would record three of the songs for Big Seven's "Rock n' Roll" album. To further placate

an impatient Levy, who reportedly had underworld connections, Lennon sent him three rough recordings—which Levy then released without authorization.

An unintimidated Lennon countersued and was a calm and determined witness in court. A final judgment in August 1976 awarded over \$400,000 in damages against Levy and his company to Lennon and Capitol/EMI. Levy was later sentenced to 10 years in prison on extortion charges.

(Paul McCartney faced a possible legal complaint over the Beatles song "Ob-La-Di, Ob-La-Da" from the

"white album." According to Showbiz Cheat Sheet, Nigerian congo player Jimmy Scott—who introduced the Yoruba phrase to McCartney sought a songwriting credit, but the Beatle disagreed because Scott had not originated the chant. When Scott was jailed for failing to pay alimony, McCartney agreed to pay Scott's legal bills under the condition that he would no longer pursue a co-writer's credit on the song.)

'WHY DIDN'T I REALIZE?'

On Feb. 11, 1964, the Chiffons were among the opening acts at the Beatles' first U.S. concert, at Washington Memorial Coliseum. Six years later, George Harrison released a song that reunited some of them in an improbable and unpleasant way.

"My Sweet Lord"—a late-1970 No. 1 hit in the United States and Great Britain—became the subject of a copyright lawsuit filed on Feb. 10, 1971. Struggling publisher Bright Tunes Music claimed the music stole from the 1963 Chiffons hit "He's So Fine."

The case did not go to trial until 1976 because Bright Tunes went into receivership. Although Harrison said he had the Edwin Hawkins Singers' "Oh Happy Day" on his mind when he wrote his song, he was ordered to pay \$1.6 million in damages.

> "I wasn't consciously aware of the similarity when I wrote the song," Harrison said,

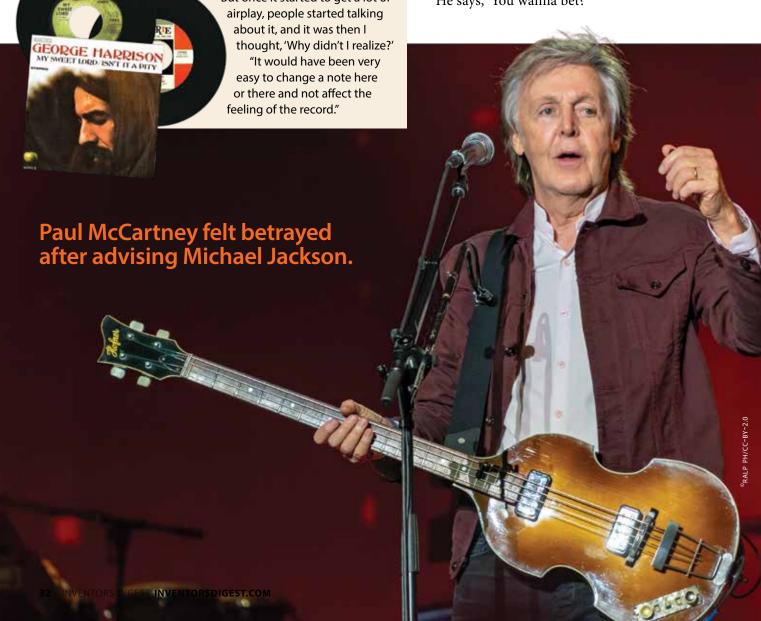
> > according to Performing Songwriter. "But once it started to get a lot of airplay, people started talking about it, and it was then I "It would have been very

Then in March 1969, James and Silver shocked the band by abruptly selling their shares in Northern Songs to Associated Television (ATV) for £1,525,000, giving the Beatles no shot at a buyout.

There are conflicting reports as to where the Beatles were at this time. Many accounts say Lennon was on his honeymoon with Yoko Ono in Amsterdam when he read about the sale in the newspaper, then immediately phoned McCartney. But in an 11-second YouTube clip of McCartney recalling the incident, he claimed the Beatles were in Rishikesh, India, with the Maharishi Mahesh Yogi (although this well-chronicled visit was in 1968).

McCartney recalled: "When we got back to town, we say 'Dick, you can't do that!'

He says, 'You wanna bet?"



Lennon and McCartney rejected an offer by ATV to buy their shares and attempted to gain a controlling interest in the company but failed. The two sold their stock (Lennon's 644,000 shares, McCartney's 751,000) in October 1969 for £3.5 million.

By the end of the year, Northern Songs was 92 percent owned by ATV, according to The Beatles Bible.

The March 1969 blockbuster came just five months before a newly signed Motown group from Gary, Indiana, the Jackson 5, made its national TV debut at the Miss Black America Pageant by singing "It's Your Thing." Ten-yearold Michael Jackson was described by Rolling Stone magazine as "a prodigy" with "overwhelming musical gifts" who "quickly emerged as the main draw and lead singer."

The stars were aligning for a superstar pairing that would abruptly end with the surreptitious stroke of a pen. The day of The Fateful Dinner was coming.

The doggone songs are mine

McCartney does not recall the date of a strange phone call he received some 50 years ago.

He once told the British Daily Mirror: "Somebody rang me up and this high voice I didn't recognize said: 'Hi, Paul.'

"I thought, 'This is a girl fan, and how the hell did she get my number?' I was quite annoyed. It wasn't a girl, it was Michael Jackson, and he basically said, 'Do you want to make some hits?""

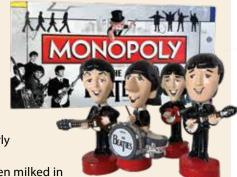
According to Biography.com, the two became friendly in the mid-1970s and met to discuss possible songwriting collaborations. Meanwhile, ownership of the Beatles' catalogue remained with ATV.

McCartney and Jackson eventually teamed for "The Girl Is Mine," the lead single from Jackson's "Thriller" album (1982), and "Say, Say, Say," from McCartney's album "Pipes of Peace" (1983).

It was during work on the latter song that Jackson had dinner at McCartney's estate near London. What ensued was a painful lesson for McCartney about the importance of protecting creative works; a financial and creative bonanza for Jackson that was arguably the signature music

SOME IP, POST-BEATLES

Beatles bobbleheads for the car dashboard. Bubblegum cards. Coloring books. Even a Beatles Colorforms™ set (very hard to find today). People of a certain age remember some of the group's early merchandising.



The cash cow has been milked in recent years via endeavors/products

including anthology projects, a tour by Cirque du Soleil called The Beatles Love, Beatles Monopoly and Trivial Pursuit games, phone ring tones—and our favorite, a Ben & Jerry's ice cream called Imagine Whirled Peace in honor of John Lennon.

Of course, the Beatles' music is still the prevailing profit push. When the hit TV series "Mad Men" used the song "Tomorrow Never Knows" in a 2012 episode, the royalty fee was \$250,000.

Beatles songs did not become available on iTunes until November 2010. When they did, within a couple of days 28 of the top 100 tunes downloaded were by the Beatles, according to the BBC. The group also made up 16 of the top 50 albums, including four in the top 10.

It was 1964 all over again.

publishing coup in history; and a sudden parting note in a well-publicized friendship.

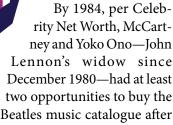
After the meal, according to pophistorydig.com: "Paul produced a thick booklet displaying all the song and publishing rights he owned, such as those of 1950s rocker Buddy Holly and others. 'This is the way to make big money,' he told [the young-20s] Jackson. 'Every time someone records one of these songs, I get paid. Every time someone plays these songs on the radio, or in live performances, I get paid.'

"McCartney was then reportedly earning about \$40 million a year from other people's songs. Jackson became quite interested as McCartney paged through his booklet. He wanted to know more about owning songs, and how they were acquired and put to use."

The story goes that when McCartney was finished explaining, Jackson told him jokingly that someday he would own the ex-Beatle's songs. A couple years later, he did.

"Every time I sing 'Hey Jude,' I've got to pay someone."—PAUL MCCARTNEY,

AFTER MICHAEL JACKSON WON PUBLISHING IGHTS TO THE REATI FS' MUSIC IN 1985



ATV had been sold to Australian billionaire Robert Holmes à Court. But they passed, reportedly determining the \$40 million price tag was too high. (Also, some speculated that even though McCartney was worth hundreds of millions of dollars, he did not want to appear greedy or disrespectful of his and Lennon's music.)

Jackson, through attorney John Branca, stepped in.

On Aug. 14, 1985, after back-andforth negotiations, he outbid McCartney and won the approximately 250-song Beatles catalogue—and about 4,000 in total, including some from artists including the Rolling Stones and Elvis Presley—with a bid of \$47.5 million. (Rights to the hit "Penny Lane" were not included, according to Market Realist, because Holmes à Court had gifted those to his daughter.)

McCartney was furious. He called Jackson's move "dodgy," per mccartney.com, "to do something like that, to be someone's friend, and then buy the rug they're standing on."

Not long afterward, Jackson began making deals in which Beatles songs appeared in commercials—another insult to the integrity of the music, McCartney said. He was particularly upset when Jackson licensed the song "Revolution" to Nike for \$500,000 in 1987.

Jackson turned the catalogue caper into a staggering windfall. The perceived blow to the Beatles' legacy was most crushing for McCartney, as was the blow to his ego.

"You know what doesn't feel very good," he said in 2006, "is going on tour and paying to

sing all my songs. Every time I sing 'Hey Jude,' I've got to pay someone."

McCartney said he wrote letters to Jackson in an attempt to improve the situation, to no avail. They did not speak to each other again. Jackson died in 2009 at age 50.

Getting back, and a P.S.

Eventually, another opportunity arose for McCartney. As even casual observers of modern music know, he eventually got what he felt was rightfully his.

Amid reported financial challenges, Jackson had sold half of ATV to Sony in 1995 for about \$100 million—more than twice what he bought it for 10 years earlier. The result was Sony/ATV Music Publishing.

When Jackson died suddenly in 2009, his share of the catalogue was assumed by his estate, run by attorney Blanca and John McClain. Sony bought out the Jackson estate's share for \$750 million in 2016.

In early 2017, McCartney sued for the rights of the Beatles catalogue while citing a provision of the U.S. Copyright Act of 1976. It allowed songwriters to retain the publishers' share of their copyrighted works released before 1978 after a 56-year period. He received the copyrights to most of the catalogue in a private settlement with Sony/ATV.

Full control of the Beatles' music publishing catalogue was finally his.

For centuries—and up to, say, 50 years ago—intellectual property was not a major consideration for creators and artists. Though Berman said the Beatles' rugged publishing rights journey is understandable, he offered this advice for today's content providers, inventors and others who rely on royalties:

"Try to avoid being taken advantage of early in your career by being informed and try to improve your contract, if possible. But remember, you are not Paul McCartney or Taylor Swift; nor were they early in their career.

"You may need to take the deal on the table in order to get to the next better one." ♥

APPLE BITS

Apple Corps Ltd., conceived by the Beatles in 1967 after the death of their manager Brian Epstein and launched the following year, has had an interesting if not tumultuous existence. Much of that involved multiple court actions with Apple Computer (now Apple Inc.).

In a May 14, 1968, interview on "The Tonight Show Starring Johnny Carson," John Lennon explained the origins of the Beatles' holding company: "Our accountant came up and said, 'We got this amount of money. Do you want to give it to the government or do something with it?' So we decided to play businessmen for a bit, because we've got to run our own affairs now. So we've got this thing called Apple which is going to be records, films, and electronics—which all tie up."

The Beatles did not run their own affairs for much longer. With Apple floundering due to a lack of professional management, the group hired Allen Klein as their manager in 1969.

Mick Jagger had reportedly recommended Klein to McCartney when Klein took over as the Roling Stones' manager in 1965. By the end of the decade, Klein had bought the rights to the Stones' early songs and the group was out of money (see October 2022 Inventors Digest cover story.)

Bringing on the abrasive, notorious Klein divided the group (McCartney preferred his father-in-law, Lee Eastman). McCartney sued the other Beatles to try to dissolve the Beatles' partnership, all but spelling the end of the band; Klein served as Lennon's manager until he suggested Yoko Ono not perform at George Harrison's "Concert for Bangladesh."

McCartney and Ringo Starr still own and control Apple Corps (as do the estates of Lennon and George Harrison). The company remains a lucrative endeavor—with the 1995 "Anthology" CD and recent "Get Back" in-studio documentary, a collaboration with WingNut Films Ltd., among the highlights.

Apple Records filed a lawsuit against Apple Computer for trademark infringement in 1978. The case was settled in 1981, with the computer firm forced to pay \$80,000 to the Beatles' company. One condition was that Apple Computer agreed to stay out of the music business. (This didn't last.)

In 1989, Apple Corps alleged that computers' ability to play back MIDI music violated the 1981 agreement with Apple Computer. That was settled in 1991; terms undisclosed.

In 2003, Apple Corps alleged that the iTunes Music Store and the iPod violated the agreement not to distribute music. The Beatles' company lost the case in May 2006.

According to The Beatles Bible, to ensure final ownership, Apple Inc. filed trademark applications with the European

Trademarks Office in March 2011 under 14 international classifications covering various purposes—including computer hardware, online social networking services, mobile phones, musical instruments, games, clothing/headgear, advertising, education and broadcasting.

Ironically, the trademark for the Beatles' Apple Corps logo is now owned by its longtime court sparring partner Apple Inc., according to a notice posted by the Canadian Intellectual Property Office in 2012.

A win for fans: Apple's need to conform to copyright law proved a windfall for Beatles fans in 2013, when 59 of their previously unreleased songs were released.

> Recent changes in European Union copyright laws prompted the releases. The stipulation is that unreleased recorded material can revert to the public domain after 50 years. So Apple had to release the material for public purchase, or essentially lose it for nothing.

Apple 1 (Do-Be-Do-Be-Do): It could only happen with the Beatles: The first song to be catalogued by their newly formed Apple Records was sung by the man who earlier figured the group "would die in New York" after being introduced in America in 1964.

"I guess I was wrong," said Francis Albert Sinatra, who in 1968 recorded "Maureen is a Champ" in honor of Ringo Starr's wife's 22nd birthday. Commissioned by Apple executive Peter Brown, the record that became Apple 1 was given to her at her birthday party on Aug. 4, 1968.

The tongue-in-cheek cover of the Rodgers and Hart classic "The Lady is a Tramp" featured rewritten lyrics by Sammy Cahn that were personalized for Maureen, such as:

She married Ringo, and she could have had Paul That's why the lady is a champ.

No copyright protections apparently needed for this one. All stamping molds/tapes of the recording were destroyed, with many reports saying no other copies of the record exist (although it's still available in mp3 form).

It isn't known whether Maureen Starkey Tigrett's family still owns the original record. She died in 1994.

This much is certain: You must listen to this song to believe it—a fun and loving gesture by a music legend who never hid his contempt for rock 'n' roll but called George Harrison's ballad "Something" "the greatest love song of the past 50 years."

Go to youtube.com/watch?v=QyyF8_cq7SM while the ode to Maureen is still there.



National Inventors Hall of Fame to induct

October ceremonies will celebrate 50-year anniversary, partnership with USPTO

hen the National Inventors Hall of Fame was founded in 1973 in partnership with what is now the United States Patent and Trademark Office, there was one inductee: Thomas Edison.

Edison was a very inclusive, team-oriented inventor. So it is fitting that he now has more than 600 contemporaries in this exclusive membership.

The latest 16 NIHF entrants, announced January 6 at this year's Consumer Electronics Show, will be honored on October 26 at one of the innovation industry's most highly anticipated events: "The Greatest Celebration of American Innovation®." The event, in Washington, D.C., will also celebrate the NIHF's 50th anniversary.

The annual illumination ceremony will be on October 25 at the NIHF Museum at USPTO headquarters in Alexandria, Virginia. There, new inductees will place their names on illuminated hexagons in the museum's Gallery of Icons™.

The Class of 2023:





Rodolphe Barrangou and Philippe Horvath: CRISPRenhanced food products.

These two molecular biologists discovered that CRISPR sequences and associated proteins comprise an acquired immune system in bacteria. Applying their research

to enhance starter cultures in the dairy industry, they improved the world's food supply and laid the foundation for the field of gene editing.



Robert G. Bryant: LaRC-SI (Langley Research **Center-Soluble Imide).** A NASA chemist, Bryant developed this polymer used as an insulation material for leads in implantable cardiac resynchronization therapy devices. LaRC-SI enables small, flexible, reliable leads that are easier to implant, benefiting patient outcomes.





Emmanuelle Charpentier and Jennifer Doudna: **CRISPR-Cas9** gene editing. Charpentier, a microbiologist,

and Doudna, a biochemist, co-invented the geneediting system. It is a versatile technology that provided the means to edit genes on an unprecedented scale

with extremely high precision. For this work, they won the Nobel Prize in Chemistry in 2020.



Lynn Conway: Very Large-Scale Integration (VLSI). Conway and NIHF inductee Carver Mead transformed the global

microelectronics industry with their invention. This revolutionary technology, detailed in their groundbreaking textbook "Introduction to VLSI Systems," allowed small teams of individuals to design powerful chips.



Rory Cooper: Wheelchair technology. A biomedical engineer, his innovations have improved manual and electric wheelchairs, and advanced the health, mobility and social inclusion of people with disabilities and older adults. His

research has been informed by his own experience as a disabled U.S. Army veteran.





Katalin Karikó and Drew Weissman: Modified mRNA technology used in COVID-19 vaccines.

Fundamental research by Karikó, a biochemist, and Weissman, an immunologist, laid a crucial piece of the foundation for the mRNA COVID-19 vaccines developed by Pfizer-BioNTech and Moderna. Several billion mRNA vaccine doses have been administered worldwide since December 2020.



Luis von Ahn: reCAPTCHA.

A computer scientist, von Ahn co-invented the website security program CAPTCHA, or Completely Automated Public Turing test for telling Computers and Humans Apart. He then created reCAPTCHA, furthering this work while assisting

in digitizing books and other archives. He also co-founded Duolingo, whose online platform is the world's most popular way to learn languages.

Angela Hartley Brodie: Aromatase inhibitors



(posthumous). Hartley Brodie discovered and developed this class of drugs, which can stop the production of hormones that fuel the growth of cancer cells. Aromatase inhibitors are among the leading therapies against breast cancer.

The induction of Luis von Ahn, inventor of the website security program CAPTCHA, will come on the 50th anniversary of the invention of ethernet technology that allows connectivity to local networks of different kinds.



Marjorie Stewart Joyner: Permanent wave machine (posthumous). Stewart Joyner invented a permanent wave machine in the 1920s. A beautician, salon owner, instructor and executive for the Madam C. J. Walker Co.,

she established beauty industry standards and powerfully advocated for civil rights.





Cyril Keller and Louis Keller: Bobcat® skidsteer loader (posthumous). These brothers played a key role in

launching the compact equipment industry in the late 1950s and early 1960s with their invention of the world's first compact loader, which became the Bobcat skid-steer loader.



James A. Parsons Jr.: Durimet 20 stainless steel alloy (posthumous). A metallurgist, Parsons created the corrosionresistant, stainless steel alloy. Invented in the 1930s, Durimet 20 is still widely used today in industrial processes that involve

corrosive chemicals.



Roger Tsien: Green fluorescent protein (GFP) variants (posthumous). For his contributions to creating a full palette of fluorescent proteins that enable scientists to track multiple cellular processes simultaneously, the biochemist

shared the 2008 Nobel Prize in Chemistry. ©

DETAILS: invent.org/induction

Invent Some Balance

SET ASIDE DAILY TIME FOR CREATING, PONDERING BUSINESS ASPECTS, EVEN VISUALIZATION BY APRIL MITCHELL

When you are passionate about what you do, taking a break or turning things "off" can be difficult.

I have struggled with this.

It is wise to try to establish and maintain a balance to enjoy everyday life with your family. Some suggestions:

Set a routine

I have found that establishing a routine can be of immense help. Yes, you never know when genius will strike, so always have a notebook on hand or a notes section on your phone ready to go.

It is important to set aside daily time to work on your projects or inventions. Many inventors and designers have fulltime jobs doing other things; inventing is a hobby for them, a hope or

dream to become a full-

time job down the road.

Put that time you scheduled with yourself on your calendar as if setting a meeting with someone else. If time allows, do this a couple times a day. This should be

considered as important as meeting with any other person.

You wouldn't stand up someone else or double-book a meeting, so respect yourself enough to show up for your daily meeting. I have seen many inventors struggle with this.

Part of a good routine is having time set aside not just for creating but also the business side of things like research, filing provisional patent applications, connecting with people on LinkedIn, contacting and calling companies, follow-ups, etc. We need to think about our goal—and if that is to get our inventions or designs into retail, we need dedicated time to do all the business stuff.

Because I enjoy creating, I often negotiate or bargain with myself and have to get a certain amount of emails sent out or do things I'm not as excited about before working on a more fun part of a project or starting a new one.

I make my list of "to dos" and then rate them in terms of importance and time sensitivity. I try to do the top things on my list before the more fun and creative things.

Make time for nothing

Having scheduled "nothing" time to let our minds wander is extremely important.

The moment we wake up and right before we go to bed is the best time to tap into our subconsciousness, which I have found to help with creativity. Find out what time of day works best for you when you feel most in touch with your creativity, as well as a place where you feel inspired or creative and set time aside daily to think, dream and create.

During the early morning and right before I go to bed, I also like to do some visualizations where I "see" my products and feel the emotions

You wouldn't stand up someone else or double-book a meeting, so respect yourself enough to show up for your daily meeting.



I would feel when I see my inventions on store shelves. I see each one of my products in the store as I "walk" through the aisles.

Studies have shown that our brain often does not distinguish real from Imaginary—and this is a powerful tool. When we repeat the same visualization over and over, we are engraining it into our memory to seal in the experience.

This can also help you believe in yourself and feel empowered. What a great way to get ready for success!

Buddy up!

As excited as you are about your inventions, it's thoughtful to remember that not everyone else is as excited. A great solution—so your friends and family don't run from you when they see you head their way—is to find a friend who shares your excitement about inventing. This is a person you can talk with about your projects, check in on and vice versa, and cheer each other on.

Your buddy doesn't have to live nearby. Having someone to do online meetings with works great, too!

Recharge by taking a break

It's important to take a break from projects and enjoy the rest of what the world has to offer. Get outside; move your body; go on an adventure; try something new; spend quality time with loved ones.

Interestingly, during or after this little break I often find myself very inspired to create, or a problem I had on a project now seems to have a clear answer. If this occurs, I recommend quickly jotting down some notes and/or doing a quick sketch or two so you can come back to the idea when you have time.

Get your year off to a great start by trying some of these tips to aid in your balancing act. €

April Mitchell of 4A's Creations, LLC is an inventor in the toys, games, party and housewares industries. She is a two-time patented inventor, product licensing expert and coach, and has been featured in several books and publications such as *Forbes* and *Entrepreneur*.



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NEED A MENTOR?

Whether your concern is how to get started, what to do next, sources for services, or whom to trust, I will guide you. I have helped thousands of inventors with my written advice, including more than nineteen years as a columnist for *Inventors Digest* magazine. And now I will work directly with you by phone, e-mail, or regular mail. No big up-front fees. My signed confidentiality agreement is a standard part of our working relationship. For details, see my web page:

www.Inventor-mentor.com

Best wishes, Jack Lander

5 Resolutions That Carry Weight

CHALLENGE YOURSELF IN WAYS THAT WILL PROVIDE BETTER PERSONAL PROTOTYPING FITNESS BY JEREMY LOSAW

Y FAVORITE new year's resolution that kept invading my Instagram feed was: "My goal was to lose 10 pounds this year. Only 15 more to go."

It so brilliantly captured the optimism of setting new goals and the often-futile nature these resolutions. Even with the cliche goals of losing weight and eating right, there is value in taking a step back, evaluating our daily practices and making adjustments in hopes of a better plane of existence. This can be done for all aspects of our lives—including prototyping.

Consider these five doable challenges to improve your prototyping and give you a sense of accomplishment, even if you don't hit your fitness goals.

Sketch

My least favorite phrase I hear during an ideation session is, "but I can't draw."

For some people, drawing and sketching ramp up anxiety nearly as much as public speaking. They grip the pencil tightly, furrow their brows and tepidly move the pencil across the page—only to crumple their paper in disgust before they finish.

Drawing and sketching is a skill, learned and honed over time. It's hard to sketch things to look like they seem to the eye. However, you don't need to be a professional artist to communicate an idea for the prototype. "Quickand-dirty" sketches can communicate much better than words in most cases.

To help drawing skills and unlock the negative energy around sketching, I like the quadrant game.

Take a piece of paper and fold it in half twice to make four panels. Then, find something

around the house to sketch-maybe a Hot Wheels car or a TV remote—set a timer for one minute, and draw the object as best you can in the first pane.

Keep lowering the sketch time in each pane to 30 seconds, 15 seconds, all the way down to 7 seconds. This trains your eye to pick up on the most important features of an object, also giving you the freedom and permission to move the pencil and make mistakes.

Learn a new skill

This helps to expand the palette of possibilities you can build into your prototypes. It is also great fun.

Fortunately, we live in an age where there are plentiful YouTube videos to show us how to do different things, and low-priced kits we can use to experiment with new techniques.

Maybe you don't know anything about electronics or coding. Head over to Adafruit, pick up a Circuit Playground Express, and learn about sensors and easy ways to code. Never made a mold? Pick up a kit from SmoothOn and make a urethane part from a silicone mold.

Lean into the unknown and challenge yourself to realize where your prototyping shortcomings are, then take steps to fill the gaps.

Clean your shop

Most inventors have at least a few tools, if not a fully-kitted-out shop with prototyping equipment to help build their products. It is much more fun to build and invent than to clean, so a shop can easily get out of hand and be too dirty to work effectively. Tools don't get put away or

need maintenance; raw materials and half-used pieces are left strewn about; dust and dirt gets all over the place.

Cleaning the shop gives you a chance to reorganize materials, refresh and put away your tools, and give you a nice physically and psychologically clean space to create your next product.

Expand your shop

Once the shop is clean, it is a good time to expand your shop capabilities. There is no shortage of great maker tools to add after getting your holiday gift cards.

Cordless power tools are always getting lighter and more powerful. Your local home goods stores are stuffed with them.

3D printers have continued to drop in price and increase in quality. A decade ago, it was unimaginable to have resin-based 3D printers at home; now, high-quality desktop versions are available online for just a few hundred dollars.

Tools you have at your disposal are capabilities that will save time in your development cycle and reduce costs to outside vendors.

Review old notebooks and ideas

Hopefully, like a good inventor, you have been keeping good notes on great ideas you have had and have been documenting your prototype testing. At the very least, you probably have a list of random ideas in a notepad on your phone.

No matter what type of documentation you have, it is good to review old notes and ideas. You may find a concept you forgot about that sparks new enthusiasm, or you can apply new learnings to make it come to life.

Look at old photos of prototypes to get inspiration for projects that are on your bench. See if some of your new tools or skills can enhance an old idea. ♥

Below left: A group of Dominican students and teachers from recent travels play the quadrants game, rapidly sketching the remote-controlled car on their table. **Below: Personal** notebooks are filled with quick sketches (and chocolate stains), ready for periodic review to see if anything sparks a new idea. Below, bottom: Losaw's daughter, lvy, learns to solder some LEDs for one of her projects.

To help drawing skills and unlock the negative energy around sketching, try the quadrant game.









'Now Batting .700

PREDICTIONS FOR PATENT-RELATED DEVELOPMENTS AROUND THE WORLD IN 2022 WENT WELL—MOSTLY BY LOUIS CARBONNEAU

YEAR AGO in mid-January, I wrote a column with five predictions for 2022, followed shortly thereafter by another set of five. The initial ones:

- Kathi Vidal will be the new USPTO director.
- The U.S. Department of Justice will revise its Standard Essential Patents policy.
- The U.S. Supreme Court will confuse everyone, again.
- Judge Alan Albright will continue to lose control over cases in the Western District of Texas.
- The International Trade Commission will become the forum of choice for large patent cases.

In July 2022, I revisited these first five predictions and was tracking quite nicely. My notes were as follows:

"On these five, I am pretty much batting 1.000 so far. Vidal was confirmed a few months ago despite some real grassroot campaigning from the inventors' lobby. The DOJ did back off on its proposed policy earlier this year. SCOTUS just left us as confused as we were before by declining to hear the American Axel case. Judge Albright is definitely having the hardest time keeping his cases in the Western District of Texas, with defendants successfully transferring cases to friendlier districts for them—including Apple, which somehow convinced the U.S. Court of Appeals for the Federal Circuit that having tens of thousands of employees in Austin does not create enough of a nexus to be sued there. ...

"Finally, ITC cases are on the rise, but only for the high-risk/high-reward cases, given the astronomical costs that are required to sustain a complaint there. On that last one, it also seems that some cases that could have been brought before the ITC are rather asserted in Europe where the courts can readily issue an injunction AND adjudicate on damages, which the ITC cannot."

A few months ago, we also discussed how Judge Albright's ability to hear patent cases was hijacked by his Chief Judge Orlando Garcia who responded to pressure from Chief Justice John Roberts of the Supreme Court, who himself caved under the pressure of two U.S. senators sending him a letter complaining that one of the most competent patent judges in the country, a former patent litigator himself (which is a very rare breed on the bench), was hearing too many patent cases.

The irony in all that is that several judges, in the same Western district of Texas who were forced to take on patent cases they have no interest in hearing, are finding ways to send them back to Judge Albright.

Furthermore, many cases Albright had started to hear are grandfathered to him when other cases involving similar facts or parties are filed—to a point where the impact of this imposed rotation has actually been a lot less severe than anticipated.

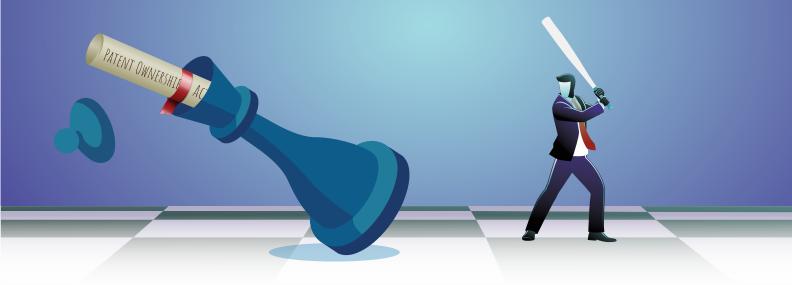
Finally, with a new chief judge replacing Judge Garcia, it will be interesting to see if this rotation of patent cases between all 12 judges in the Western District of Texas will endure.

Final 5

Which brings us to our final five predictions from a year ago:

- U.S. patent litigation will continue to increase.
- Germany will do away with easy injunctions.
- The Unified Patent Court in Europe will finally get going.
- China will stop any pretense of a neutral forum.
- A new pro-patent lobby will emerge in the United States.

According to a recent RPX report tracking each case filed in the year, the cases filed in 2022 remained steady over the previous year. So, not batting this one out of the park as far as predictions go—but not a strikeout, either.



US Inventor led a PR blitz to defeat the infamous Pride in Patent Ownership Act that was going to get stapled to the omnibus bill Congress passed before its year-end recess.

Regarding Germany, I commented in a previous column that the German Parliament passed legislation in August 2021 approving a change in Section 139 of the German Patent Act codifying the principle of "proportionality and the interest of both parties must be considered when granting an injunction."

Additionally, the German courts were working to better align the time elapsing between a decision on infringement and on patent validity, which under German law are bifurcated. As of today, the injunction in Germany is still alive and kicking—and although the two changes listed above are still gaining ground, they have not yet affected the practice.

This keeps Germany a forum of choice for patent litigation. All you need are German patents, of course! So, perhaps a strikeout on this one, but I'm happy to be wrong when it comes to nurturing a better environment for patent owners.

Ah, the UPC! Every conference I have attended in the past two years has featured a large component of speakers sharing their best practices when dealing with the Unified Patent Court.

Yes, as of this day, it still hasn't started.

Thank you, Europe, for procrastinating again! Now, on to China. Although there are very few published decisions on which to base my conclusions, suffice it to say that when we talk to buyers and litigators (which we do every day at Tangible IP), we don't hear that Chinese patents are in the same high demand they were only a couple years ago.

Last but not least, we have definitely seen a resurgence in the pro-patent/inventors narrative in the United States—primarily driven by the US Inventor group (not to be confused with the U.S. Inventors Association). That organization has done yeomen's work bringing attention to inventor rights to Congress. What US Inventor lacks in lobbying budget, it more than compensates for with grit and persistence.

Recently, the group led a PR blitz to defeat the infamous Pride in Patent Ownership Act that was going to get stapled to the omnibus bill Congress passed before its year-end recess. (Editor's note: See the "Everybody's Talking" page in the January 2023 Inventors Digest.)

Now it is on a crusade to prevent Congressman Darrell Issa from becoming the chairman of the influential House IP subcommittee, based on his track record of "having offered one-sided legislation against patent rights and having been among the driving forces that gutted U.S. patent rights."

I am set on improving my batting record in 2023. And to help my cause a bit, I have decided to stick to only five predictions this time, which I will discuss in our next column! €

Louis Carbonneau is the founder and CEO of Tangible IP, a leading patent brokerage and strategic intellectual property firm. He has brokered the sale or license of 4,500-plus patents since 2011. He is also an attorney and adjunct professor who has been voted one of the world's leading IP strategists.



The Year of **Tattoos in Court?**

LATE 2022 RULING COULD PORTEND NEW ERA IN LITIGATION INVOLVING BODY ART BY ADRIENNE KENDRICK

All Eye On Washington stories initially appeared on IPWatchdog.com.

CCORDING TO 2021 data, roughly 13 percent of Baby Boomers had at least one tattoo, compared to 32 percent of Generation Xers and 41 percent of Millennials.

Other than disagreements about the appropriateness of visible tattoos in certain workplaces, tattoos generally cause few headaches for their owners, and certainly not legal headaches.

That may no longer be the case, however, as tattoos become more common among celebrities and other high-profile individuals whose likenesses are commonly portrayed in digital media.

Although there has been relatively little litigation concerning tattoo copyrights, 2023 could be the year that changes.

Landmark case?

The watershed moment for a new era in tattoo copyright litigation came in 2022. In Alexander v. Take-Two Interactive Software, Inc., tattoo artist Catherine Alexander sued the defendants in the U.S. District Court for the Southern District of Illinois, asserting copyright infringement arising from the defendant's allegedly unauthorized use of her tattoo designs in their WWE 2K video game series.

Between 2002 and 2008, Alexander inked several tattoos on WWE professional wrestler Randy Orton that included tribal tattoos, a bible verse, a dove, a rose, and a skull. A digital re-creation of Orton's likeness, including Alexander's tattoos, later appeared in Take-Two's WWE 2K video game series.

The creation of the digital likeness of Orton required no artistic input other than the re-creation of a reference photograph. After unsuccessful attempts to negotiate a license, Alexander sued Take-Two, alleging unauthorized use of her original works.

Defendants presented the affirmative defenses of fair use, de minimus use (about minimal things), and implied license. In a partial summary judgment, the court found Alexander owned valid copyrights for the tattoos at issue and that the defendants had copied her work. It rejected the defendants' de minimus defense as unviable but found triable issues of fact as to the fair use and implied license defenses. Ultimately, only the fair use issue was presented to a jury.

In October 2022, the jury found that Take-Two had infringed Alexander's copyrights, awarding her \$3,750 in damages but denying lost profits.

This makes Alexander's case the first of its kind to reach trial, potentially opening the floodgates for future tattoo copyright litigation. And given the novelty of the issues presented, defendants are almost certain to appeal.

Complaint, take two

A remarkably similar case in the U.S. District Court for the Northern District of Ohio is presenting many of the same issues.

In *Hayden v. 2K Games, Inc.*, tattoo artist James Hayden is suing video game publishers 2K Games and Take-Two Interactive Software for copyright infringement, alleging that the defendants' use of his tattoo designs constitutes unauthorized use of his registered copyrights.

Similar to the Alexander case, 2K Games' products use digital reproductions of the likenesses of several NBA players, including their tattoos.

In their motion for summary judgment, the defendants argued the affirmative defenses of





These cases make it clear that tattoo artists are increasingly demanding greater protection for their works and that the courts are at least receptive to the idea.

fair use, de minimus use, and implied license. Addressing the de minimus use defense, the court found that whether the tattoos are "observable" and whether the defendants' replication diminishes the original works are questions for a jury.

Turning to the fair-use defense, the court found that, while the publication factor favored defendants, all fair use factors presented questions of fact. Similarly, the court found that whether the plaintiff intended to license thirdparty use of his tattoo designs was for a jury to decide. The trial likely will commence this year.

These cases make it clear that tattoo artists are increasingly demanding greater protection for their works and that the courts are at least receptive to the idea.

Things are changing

Both the Alexander and Hayden cases are notable departures from recent rulings.

In 2020, in Solid Oaks Sketches, LLC v. 2K Games, Inc. before the U.S. District Court for the Southern District of New York, the plaintiff tattoo licensing company argued that a video game publisher's reproduction of basketball players with their real-life tattoos infringed its copyrights in its tattoo designs. There, the court granted the defendants' motion for summary judgment, accepting all three of the defendants' affirmative defenses of fair use, de minimus use, and implied license.

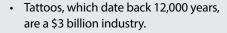
Although the court noted that the United States Court of Appeals for the Second Circuit has not ruled on the exact circumstances under which an implied non-exclusive license can be found, it found one here because the players requested the creation of the tattoos, the tattooists inked the designs on their skin, and the tattooists knew that the players were likely to appear in media. 🕏

Adrienne Kendrick has been a professional legal writer and editor for over 20 years. She writes about IP as well as immigration law, employment law and criminal law. She is the content manager at PaperStreet Web Design



TATS FACTS

Information from TattooPro (most recent data from 2021):



- The industry is projected to grow 8 percent in the next decade.
- Italians are the biggest ink lovers globally at 48 percent, followed by Sweden (47 percent) and America (46 percent).
- There are more than 20,000 tattoo parlors in the United States, with more than 100 in both Las Vegas and Miami.
- · Oops! Tattoo removal services are projected to increase by 18 percent each year, and 23 percent of people who get a tattoo regret the decision.
- · When choosing a tattoo parlor, the first thing people consider is the artist, not the shop's hygiene.

INVENTIVENESS

loT Corner

IoT company Lexi is aiming to reduce IoT interoperability headaches between smart home devices with its new universal IoT platform.

The system consists of three parts: the Lexi Mobile App, the Universal IoT Gateway, and the Lexi Cloud. The Lexi Gateway can handle all IoT protocols including Bluetooth, WiFi, Zigbee and even LoRa; its platform can broker integrations between cloud providers such as Amazon Alexa, Google Home, Samsung SmartThings and IFTTT.

The system is upgradeable to the new Matter protocol to make life easier for smart home users who have many devices running on different protocols and platforms.—Jeremy Losaw



Little Inventors (littleinventors.org) recently partnered with the Natural Sciences and Engineering Research Council of Canada to ask children in Canada to invent something to improve the health of oceans and the lives of sea animals. "Mission: Protect our Oceans" resulted in more than 700 invention ideas. Little Inventors founder Dominic Wilcox said ideas ranged from submarines shaped like ocean animals to a unicorn mermaid that collects plastic.

Some of the made-real ideas are in an exhibition at the Montreal Science Centre through December.



What IS that?

Introducing the Presto 03430 Pizzazz Plus Rotating Oven. Cool name? Check. Looks cool? Check. Does it work? Check (4.7 out of 5 stars overall in more than 17,000 Amazon reviews). But don't you already have a pizza oven that is not open-air—and will therefore cook your pizza more evenly and faster? It's called your oven.

The year **Verlooy Herwig** was granted a U.S. design patent for heart-shaped chocolate. A lot of people were seriously sleeping on this for a long time.

WHAT DO YOU KNOW?

- True or false: A U.S. design patent was granted in 2004 for a heart-shaped pepperoni slice.
- Which famous invention was the subject of a patent application on a February 14?
 - A) Telephone
- B) Computer
- C) Incandescent bulb D) Television
- True or false: A U.S. design patent was granted for ball-and-chain Valentine's Day candies.
- first—the first U.S. rose patent, or the first conversation heart candies?
- Which of these inventors was born on Valentine's Day?
 - A) Gary Burghoff
- **B)** Thomas Edison
- C) George Washington Carver
- D) George Washington Gale Ferris Jr.

ANSWERS: 1. True, but the patent expired in 2015. Nothing is sacred anymore. 2. A. Alexander Graham Bell applied in 1876. 3. False. No charge for the idea. 4. The first rose patent was actually the first U.S. plant patent, in 1931. The first conversation heart candies were made in 1866. 5. D. The inventor of the Ferris wheel was born in 1859.

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