

Planning to be in the DC area this summer? Visit the free

National Inventors Hall of Fame Museum

The National Inventors Hall of Fame Museum is one of the Washington, DC area's hidden gems. Located at the USPTO headquarters in Alexandria, Virginia, there is something for everyone inside the storied walls of this tribute to American innovation and ingenuity.

Whether you're looking for an exciting free activity for the family, or a fun and educational field trip for students, the museum's broad variety of exhibits does not disappoint.

New and ongoing exhibits on display include:

- A Legacy of Innovation, featuring the original Bobcat prototype
- Women in Innovation
- Individual exhibits for each member of the 2023 class of inductees
- Invention: The Sky Is the Limit

For more information, visit www.invent.org/museum/plan-your-visit







Feature

Spared & Spurred Molly Wilson is Alive With Gratitude, Purpose

Inventor Spotlight

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Fort Laiderdale



ON THE COVER Quotes during Invention-Con 2023 (clockwise from

upper left): Daria Walsh, Infinity Clips inventor and founder; Sheilisa McNeal-Burgess, Fria LLC founder and CEO; Shawn Mastrian, Darkside Scientific CEO









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



Information, enthusiasm, empathy dominate the USPTO's annual showcase to help inventors of all kinds

Connie Inukai, owner of Tip'n Split Solutions who became an inventor at 70, proudly shows her patent to the audience during Day 3 of Invention-Con 2023. Inukai was a panelist with Bob Thorsen (left), managing partner of The Little Burros, and Jumoke Jackson (Mr. Foodtastic), executive chef at Slutty Vegan, private chef, motivational speaker, and author. **HEY ARE** mothers, fathers, sons, daughters, brothers, sisters like all the rest of us. Unlike all the rest of us, they are master builders.

The invention process can involve heavy lifting that almost always requires multiple hands. Panelists at "Invention-Con 2023: Building Tomorrow's Innovation" were powerful reminders of the collaborative spirit of inventing and entrepreneurship; the indisputable importance of intellectual property; and a world of resources that are waiting to be utilized.

The three-day information and inspiration smorgasbord, held mostly virtually from USPTO headquarters May 10-12 in Alexandria, Virginia, addressed the invention experience from multiple diverse vantage points: Small and large inventors.

IP experts. Government officials. Their subject matter was even more diverse: Inventing.

Marketing. Licensing. Prototyping. Patents. Trademarks. Manufacturing. Branding. Resources.

Many of those who spoke are more than master builders. They are master story-tellers who encouraged and entertained a national audience with anecdotes that had many nodding their heads while sharing the joys, disappointments, and discoveries that are partners in this journey.

You can do this

How many times have you thought of a possible invention but told friends, "I'm sure someone must have thought of this already"?

This was Daria Walsh.

She was frustrated by the fact she could not wear some of her favorite long necklaces with any outfit. Amazed to learn there was no product to solve the problem, she created Infinity Clips—a DIY necklace shortener made to work with thin chain necklaces.

A panelist on "Turning Passion to Profits," Walsh told Invention-Con she had just \$500 to start with. But her curiosity, determination, and optimism were priceless.

"I had to be creative," she said. "I made my own prototypes. I remember going through the aisles of hardware stores and craft stores piecing things together.

"I went through a hundred prototypes before I put it together. I thought it was a simple product, and it wasn't as simple. I wanted it to fit a range of styles and thicknesses."

After getting a prototype she could bring to market, she had to figure out a way to "bootstrap" her way through the patenting process.

She watched YouTube videos to learn how to write her own provisional patent application



(PPA). "For a micro entity, it's like \$70 or \$80 to file. That was the starting point."

The PPA allowed her to test her product "for a year to see if it had market potential before I started investing more money into it."

The demand was there, and manufacturing was not that difficult. Walsh, who received a utility patent in March 2022, spoke plainly about being resistant to challenges:

"You are not going to know what you are doing on Day 1. You are going to figure it out as you go. Don't let it stop you that you don't know where to start.

"Just go. Just start."

Patently crucial

Panelists were in unanimous agreement about the importance of intellectual property protection.

A co-panelist with Walsh, Sheilisa McNeal-Burgess, founded Fria LLC—a lifestyle/jewelry brand that develops technology-based cooling solutions to combat hot flashes during menopause. "Before we had product technology or anything, we knew we had to get a patent," she said.

Shawn Mastrian, CEO of Darkside Scientific, an

advanced lighting company in Medina, Ohio, went so far as to say:

"If you have something valuable, somebody is going to steal it from you. That is the reality of life.

"I'm not going to say that is OK, but you have to be OK

with that. You have to let them take the pennies off the counter and keep the goal locked in the safe under the counter."

He said he could not overstate the value of intellectual property as "something for our shareholders that continues to drive and maintain value. From my perspective, my intellectual property is the foundation. It's the soul of our company."

Delanie West, a creative marketing, business, and brand development leader, was another panelist on the topic "Know your value, equity and ownership."

"Intellectual property is everything," she said. It means "You have created something that you can defend. You created something that doesn't infringe on an existing intellectual property. Also, you are generating value whether you are marketing it, selling it yourself or licensing it."

Clarifying IP

Panelists emphasized that the value of IP encompasses not just patents, but trademarks and copyrights as well.

Co-panelist Amber Lambke, founder and CEO of Maine Grains, oversaw the transformation of a former jail into a grain mill in rural Maine. "We have restored grain production to Maine and our region, and rebuilt the infrastructure that makes it possible to clean and mill those grains into delicious human grade food for bakers, brewers, and chefs around the Northeast," she said.

Lambke said she quickly realized the importance of "building our brand and our visual look as a product, and how we chose to protect our mark." It was crucial for her to "protect some of the design elements, knowing that and having seen that sometimes brands are vulnerable to larger companies that can use that look to squeeze you out of the marketplace."

"Intellectual property is everything. You have created something that you can defend. You created something that doesn't infringe on an existing intellectual property."—DELANIE WEST

In "Branding and Trademark Protection," IP attorney Andrea Evans was asked: "How soon do you think a trademark owner should begin this trademark registration process?"

She replied without hesitation. "That is the million-dollar question. Ask it yesterday. How soon? Immediately. And there are a lot of misconceptions about trademarks."

Some people are of the mistaken notion that a patent and trademark are the same thing. A patent is a property right granted to an inventor by the USPTO that excludes others from making, using, offering for sale, selling, or importing that invention. A trademark is a word, phrase, symbol, design, or a combination thereof that



Invention-Con 2023 featured energetic, accomplished inventors; startup business experts; leaders of government programs offering free services; and USPTO officials who advised and moderated panels. Day 3's live, in-person programs were the first offered at Invention-Con in several years. identifies and legally differentiates your goods or services from others.

Matt Nuccio, president of toys and games company Design Edge, said, "The trademark is essential in the toy business. Often times it's been worth more than a patent, because products become brands"—with Cabbage Patch Kids among the many examples.

There is help and more help

Mark Madrid was giving tribute. And he was getting emotional.

An associate administrator for the Office of Entrepreneurial Development at the U.S. Small Business Administration (SBA), Madrid recently visited a female small business owner in Idaho who has 90-some patents. He told Invention-Con:

"All she did was transform her beer distillery technology process, and during COVID she was able to use that technology for PPE and masks that were transported all over the world to save lives."

Madrid added: "I lost my dad to COVID-19. I come from small business DNA. My parents built a welding business in the Texas panhandle. Clearly, we had a moment there that was indescribable.

"It was raw and emotional. I got to hold that mask."

Madrid explained that the transformation would not have been possible without the business owner leveraging U.S. agencies such as SBDC and SCORE "to change and save lives."

SBDCs (Small Business Development Centers) provide free marketing, financing, and business-related assistance to local entrepreneurs in all states as well as some U.S. territories. They are part of a partnership between the SBA and usually a local university.

SCORE is a resource partner of the SBA that provides free mentoring and education to small business owners. Its expert volunteers have "been-there-and-done-that expertise and bring that to the small businesses we serve," said SCORE CEO Bridget Weston. "We primarily do that through mentoring."

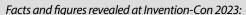
Through its main programming and individual workshops, Invention-Con also highlighted U.S. grant opportunities and the free services provided by the USPTO—including its Pro Bono offerings. In her introductory comments, USPTO Director Kathi Vidal said: "We are committed to doing whatever we can to help you build tomorrow's innovation and help you succeed."

This all fostered an aura of enthusiasm and encouragement that began with Daria Walsh during Day 1's first panel and continued right through the final panel on Day 3.

Connie Inukai, who became an inventor at 70 with three registered trademarks and a patent, told that in-person audience: "Don't listen to anybody who says you can't do it."

Find the resources you need to start and support your IP protection journey at **uspto. gov/inventors**.

Some WOW Numbers



- 13,000 IP experts working at the USPTO
- 1 million trademarks registered since the pandemic
- Over 70 percent of all trademark applications are filed by individual and small businesses.
- The U.S. Small Business Development Center has between 800 and 900 centers to offer free advising to small business owners.
- 10,000 advisers in the U.S. SCORE mentorship network

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Making Your Best Argument Before PTAB

How to write an appeal brief if your patent application has been rejected

F AN EXAMINER has twice rejected your claims or issued a final rejection of your patent application, you may file an appeal before the Patent Trial and Appeal Board (PTAB or the Board).

Keep in mind, the Board determines whether an examiner erred based on the arguments presented in the appeal brief. The Board generally will not consider issues or arguments not presented in the appeal brief.

So, a well-written appeal brief is crucial to a successful appeal and should include these key ingredients:

Your strongest arguments. Weaker arguments may dilute stronger arguments, so it is best to leave out those. Stronger arguments focus on the examiner's rejections, the relevant law, and the claim, and explain why the examiner erred (with good supporting evidence).

Arguments focused on claim terms. Patent claims define the subject matter to be protected. Rejections focus on the claim language, and your arguments should, too.

For example, you could argue that the examiner erred because the prior art does not teach a certain claim element. But avoid just stating that the prior art does not teach the claim element; also give the reasons you think this.

Claim terms are given the broadest reasonable interpretation in light of the specification (the section in which the inventor describes his or her invention in full). Disagreements over claim interpretation between you and the examiner are often dispositive of the appeal. Consequently, you should explain to the Board why the specification supports your interpretation.

Clear organization, with headings and subheadings. Each rejection must be argued under a separate heading that identifies the rejected claims by number, the statutory basis for the rejection, and the applicable prior art, if any.

For example, a heading may be: "Claims 1–4 are not obvious under U.S. Patent Code Title

35 Section 103, based on Smith and Jones." If a rejection applies to more than one claim, you may argue the claims separately, as a group, or in subgroups. Any claim argued separately or as a subgroup should be placed under a separate subheading that identifies the claims by number.

You should carefully decide how to group the claims because the groupings affect how the Board evaluates your arguments.

The Board evaluates the rejection of each separately argued claim. But for claims in a group or subgroup, the Board may select a single claim and decide the rejection for all claims in the group by evaluating only the one selected claim. All the other claims in the group stand or fall with the one selected claim.

Find more tips about writing an effective appeal brief and an appeal brief template at **uspto.gov/patents/ptab**.



WHAT'S NEXT

PROUD INNOVATION: This virtual series, tailored to LGBTQIA+ entrepreneurs and small business owners, will be June 8 and June 21 from 3 to 4:45 p.m. ET.

Part 1 will focus on how LGBTQIA+ entrepreneurs and small business owners are making valuable contributions to local, regional, and national economies. Learn about funding and resources.

Part 2 will cover building networks of support and turning ideas



To register, visit **uspto.**

gov/about-us/events/ proud-innovation-event-series.



Copyright Law Scores Win Over Celebrity

Even the title of the court case seemed lopsided: Andy Warhol Foundation for Visual Arts, Inc. v. Goldsmith.

But Lynn Goldsmith, winner in a refreshingly lopsided Supreme Court ruling (see facing page) that has been called the important fairuse case of all time, scored an epic victory for the underdog—and an important victory for copyright protection.

The mainstream media has correctly written that the landmark case was a signature test of how broadly fair use could be interpreted. What it has not reported is that the case was also about the power of celebrity.

Granted, Goldsmith is a celebrity in her own right, having taken photos of prominent rock stars and shot classic album covers. But her power and resources pale in comparison to the Warhol foundation.

A couple days after the verdict, she told reporters she spent about \$2 million in her copyright suit and was able to raise only \$50,000 in her Go Fund Me campaign. Much of the photographic community, including well-known photographers, abandoned her.

"I would bet that the Warhol foundation thought I would fold," she told Women's Wear Daily. "They (probably) thought, 'Oh, she's just some little rock-'n'-roll photographer.' They didn't know I'm from inner city Detroit ... and you had to stand up and fight for yourself."

Post-ruling comments by dissenting Supreme Court Justice Elena Kagan were eye-opening. Kagan's reference to Warhol—known for his Campbell's soup can art—as "the avatar of transformative copying" smacked of cringeworthy celebrity fawning.

Ed Sheeran understands the power of celebrity. As defendant in a case that claimed his single "Thinking Out Loud" copied Marvin Gaye's 1970s classic "Let's Get it On," he recently sang and played guitar to a New York jury at his civil trial to show how his song was constructed.

Two weeks before the Goldsmith ruling, he won his case. This is not to imply a direct cause-and-effect due to his performing in court, but it certainly didn't hurt.

As Inventors Digest has noted, the Supreme Court has dodged some important IP-related issues of late, perhaps due to possible political ramifications. This was a time for the high court to step up in a crucial case—and it did just that, for the determined daughter of an inventor as well as the protections of inventors everywhere.

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

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SUPREME COPYRIGHT IMPACT

A landmark May 18 Supreme Court ruling—that Andy Warhol violated photographer Lynn Goldsmith's copyrights when he used one of her images of Prince to create more than a dozen silkscreen portraits—was of major impact to copyright law and the U.S. music industry.

The dispute dates to 2016, the year the iconic "Purple Rain" and "Let's Go Crazy" singer died. And if the strong post-ruling statements by two of the justices are any indication, the controversy will linger.

Civilization will be OK

Andy Warhol Foundation attorneys argued that creators should be able to re-use earlier works and that a ruling against this would "chill" creativity. SCOTUS Associate Justice Sonia Sotomayor was cold to that claim.

"Lynn Goldsmith's original works, like those of other photographers, are entitled to copyright protection, even against famous artists," Sotomayor wrote, adding:

"It will not impoverish our world to require AWF to pay Goldsmith a fraction of the proceeds from its reuse of her copyrighted work. ... Nor will the Court's decision, which is consistent with longstanding principles of fair use, snuff out the light of Western civilization, returning us to the Dark Ages of a world without Titian, Shakespeare, or Richard Rodgers."

Of fair and transformative

A key factor in the 7-2 ruling was that the Supreme Court considered only fair use—not transformative use, which was the basis of a pro-Warhol ruling in 2019.

In that decision, Judge John G. Koeltl of the Federal District Court in Manhattan wrote that Warhol's images had "transformed Prince from a vulnerable, uncomfortable person to an iconic, larger-than-life figure." Such "transformative use" is often crucial in deciding whether something rises to legal fair use.

Justice Elena Kagan, who with Chief Justice John Roberts were the only dissenters in the SCOTUS decision, authored a long, at times rambling, dramatic opinion that chided the majority ruling. She called Warhol "the avatar of transformative copying."

She added that the mandate "will stifle creativity of every sort. It will impede new art and music and literature. It will thwart the expression of new ideas and the attainment of new knowledge. It will make our world poorer."

Background

Warhol created his images in 1984 as artwork for a Vanity Fair article sarcastically called "Purple Fame." (He died in 1987.)

He used a black-and-white portrait of the star taken in 1981 for Newsweek by Goldsmith, a rock 'n' roll photographer known for her images of Mick Jagger, Bob Dylan and others. Vanity Fair licensed her image for use in the magazine, credited her, and paid her \$400.

But Warhol also created more than a dozen other versions, later sold to collectors, displayed in museums and licensed for use without her consent.

When Prince died from a drug overdose in 2016, Vanity Fair re-used Warhol's image ("Orange Prince") on the cover of a tribute issue. The parent company, Condé Nast, did not pay or credit Goldsmith; meanwhile, the Warhol Foundation was paid about \$10,000 for the new image. After Goldsmith threatened to sue the Warhol Foundation for copyright infringement, the group filed a pre-emptive lawsuit to prove the works were legal.

Two years after the Manhattan judge ruled for the Andy Warhol Foundation, a federal appeals court overturned that decision, sending the case to the Supreme Court.

A blow to AI?

Music companies lauded the ruling, fearing that making fair use overly broad could provide artificial intelligence companies legal latitude to use copyrighted music to "train" their platforms—although we have likely not heard the last on that issue.

Goldsmith called it "a great day for photographers and other artists who make a living by licensing their art." —Reid Creager

BRIGHTIDEAS

Sprig Shower Infusion System

PODS THAT RELEASE **BOTANICAL FRAGRANCES** stepintosprig.com

This shower kit includes a device that can be attached to any showerhead, enabling you add Sprig Shower Pods that infuse the water with pleasant and calming aromas. Fragrances include eucalyptus, chamomile, rose, lavender and lemongrass.

The Sprig Shower Infusion System sits between the head and the water outlet in the wall. Water passes through the pod, picking up its blend of fragrances and chemicals, then exits the shower head in the form of an aromatic spray of water. Only Sprig Shower Pods can be used with this system.

For \$139, you can reserve a starter shower kit that includes three infusion pods. A six-pack of single-use infusion pods retails for \$21.





HYDRATION BIOSENSOR nixbiosensors.com

Nix is a lightweight biosensor that continuously measures sweat throughout your workout and sends personalized notifications to your phone or watch in real time to tell you when, what, and how much to drink for proper hydration.

The pod streams data to the Nix app in real time and is recharged between workouts; the disposable patch collects and reads sweat every second you are actively sweating.

Nix integrates with Apple Watch, Garmin watches and bike computers. Garmin compatibility with Android was scheduled for this spring.

The biosensor retails for \$129 and the sweat patch refills for \$25.

Rocketbook

REUSABLE, RESTICKABLE STICKY NOTES getrocketbook.com

The company's sticky notes kit is the latest product for a company known for its reusable notebooks.

As with the notebooks, you can write, scan and erase a sticky note when using any pen or marker from the company's Pilot FriXion line. The ink firmly bonds to the synthetic paper but wipes away with a little water.

A proprietary adhesive also makes them stickable for many uses. If they begin losing their stickiness, add water to help restore it. Use the free app to send notes to email, cloud destinations and more.

The future retail price is unknown, but a starter kit with 18 black sticky notes, storage case, Pilot FriXion pen and microfiber towel was offered to Kickstarter backers for \$24.



"I never said that. Pure invention. Pure invention."

—THABO MBEKI, SOUTH AFRICAN POLITICIAN

DROP

HANDHELD COLANDER FOR FRUITS, VEGETABLES store.moma.org/products/drop-colander

With its compact shape and minimal design, DROP works differently than traditional colanders while removing excess water from fruits and veggies.

The drop-shaped design consists of two parts that join by fitting one inside the other. Place your food in one of the domed halves, press the button, and slide the other half around until it's closed. Stick the handle under the water to rinse your veggies and then roll the handle back and forth in your hands quickly to create centrifugal force for removing the extra water.

You can also use DROP as a regular colander for pasta. It retails for \$33.





THE MOST IMPORTANT INVENTIONS OFTEN CREDITED TO THE SUNSHINE STATE, WHETHER TRUE OR NOT BY REID CREAGER

Coppertone was founded in 1944, after a Miami Beach pharmacist discovered a sunscreen formula that became the basis for the product. The iconic "Little Miss Coppertone" ad campaign launched in 1956.

het, but The Sunshine State is a good fit for a magazine about inventors and inventions. There is something orderly, even perfect, about some purported Florida inventions. We live in an illogical world where you drive on a parkway and park in a driveway. But maybe the fact that air conditioning and an iconic sunscreen are often credited with originating in the country's hottest state means we can resume trusting things that are supposed to make sense.

Then again: Many of the inventions Floridians claim to be theirs might not be. With so many different venues of information at our fingertips, sometimes it's hard to know for sure.

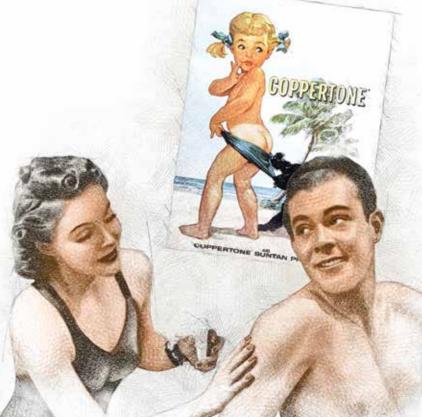
Here are the five most important claimed inventions from the state that gave us Jim Morrison, Tom Petty, Burt Reynolds, Faye Dunaway, Sidney Poitier, Gloria Estefan, Debbie Harry, Mike McCready, Disney World and its \$100-plus daily tickets for kids—hmm, let's move on to the inventions.

Sunscreen

Regular readers of "Time Tested" know there is often debate (and misinformation) about who invented what. Consistent with this, the identity of the inventor of sunscreen/suntan lotion is a little slippery, with no unanimously credited inventor.

Ancient societies used plant extracts and other natural ingredients including jasmine and olive oil as sunscreen. But they produced no product deemed reliable by the general public for blocking the sun's rays.

Benjamin Green's sunscreen discovery worked, but it was thick and stunk out loud.



This much, we know: A Miami Beach pharmacist invented the formula that became the basis for Coppertone suntan lotion, which hit the U.S. market in 1944. Benjamin Green was an airman in the South Pacific during World War II when he discovered that a greasy red jelly called red veterinary petroleum worked as sunburn protection.

But it was thick, and it stunk out loud. Green added coconut oil and cocoa butter, resulting in a product that was more pleasant to the touch and olfactory senses. This was the basic makeup of Coppertone, the leading sun care brand in America.

Parade magazine accurately notes that at least two other people independently formulated some of the first modern sunscreen products in the 1930s and '40s. Australian chemist H.A. Milton Blake produced a sunburn prevention cream that later became Hamilton Sun and Skin. It still exists.

More widely credited is Franz Greiter, a Swiss chemistry student who developed a sunscreen in 1938 after getting sunburned while climbing a mountain on the Swiss-Austrian border. He is also credited with establishing Sun Protection Factor (SPF) as the standard for measuring how long a sunscreen will protect from the sun's rays.

Greiter named his sunscreen Gletscher Crème (Glacier Cream). Although since updated, it's still on the market as well.

Air conditioning

Not only is John Gorrie generally forsaken as the inventor of air conditioning in favor of Willis Carrier, he died penniless and alone, with few believing in his invention.

However, Gorrie is widely credited as the father of mechanical refrigeration and a process that led to air conditioning. Born in the West Indies, at 30 he moved to Apalachicola, Florida, where he was a resident physician at two hospitals.

Gorrie invented a system that blew ice over patients who had yellow fever. In 1851, he filed the first patent for mechanical refrigeration. But his system never caught on.

According to The Smithsonian: "Northern icemakers who profited from shipping ice to the South lobbied against Gorrie and benefited from a public skeptical of the artificially cooled air produced by Gorrie's ice machine."

Carrier, an engineer, borrowed from previous mechanical refrigeration concepts to solve an application problem at a printing plant in Brooklyn, New York, in 1902. His system sent air through coils filled with cold water, cooling the air while removing moisture to control room humidity.

His process was further refined, and he became known as the Father of Air Conditioning.

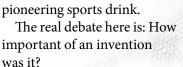
Gorrie is not forgotten, though. The city of Apalachicola honors him today with a museum and several monuments.

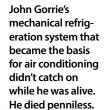
Gatorade

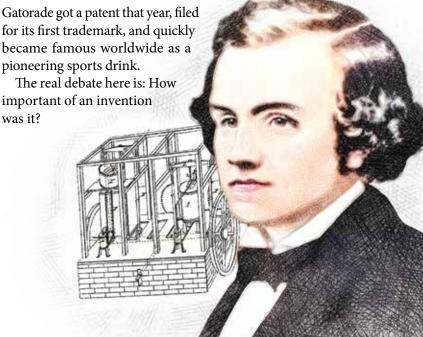
No debate here as to the inventor. In the mid-1960s, the torrid, humid heat in Florida during summer workouts and fall football games led University of Florida coaches to seek a drink that would address the resulting chemical imbalance and provide any kind of relief.

The university has said that kidney disease specialist Robert Cade determined players were sweating out their strength and endurance and losing electrolytes—minerals in the body that carry an electric charge. Cade and his team of researchers developed a drink in 1965 to restore electrolytes.

Reportedly, freshmen who drank Gatorade began outperforming varsity players in scrimmage games. The entire team was encouraged to drink it, and improved to the point that it won its first Gator Bowl in 1967.







TIME TESTED

In the past 55 years or so, a better-informed public and tougher news media have heavily doused the carbohydrate-electrolyte drink's early magic-potion claims.

Per Australian news site news.com.au: "In the 1960s, Gatorade ads made the nonsense claim the drink would get into your system 'approximately 12 times faster than water.' Drinks companies don't focus on hydration so much any more, perhaps because of a crackdown on products ... purporting to be superior to H2O."

Medical News Today summarized that "Gatorade may offer a good drink to complement water for athletes involved in intense exercise and activity. Gatorade may also be helpful to replace electrolytes lost during an illness that involves bouts of vomiting or diarrhea, or after prolonged exposure to excessive heat.

"But Gatorade contains high levels of sugar and food dyes, which may increase people's risk of certain health conditions, including weight gain and Type 2 diabetes."

and a team of researchers developed Gatorade in 1965 to help restore electrolytes in active athletes. Its benefits have since been revealed as mixed.

Dr. Robert Cade

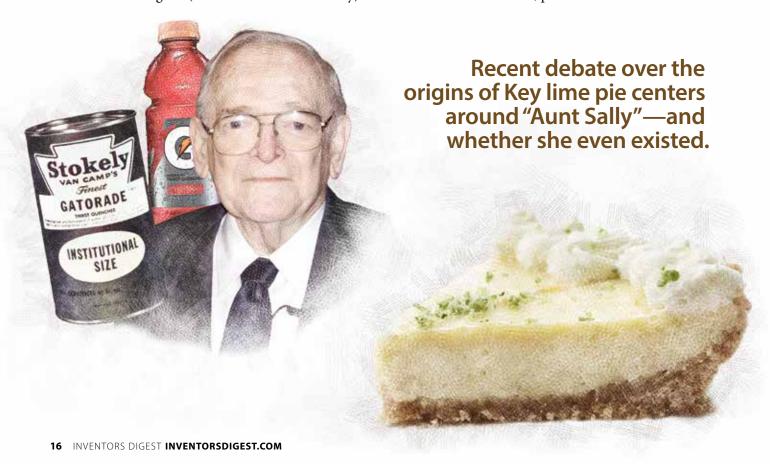
Key lime pie

Key lime pie. From the Florida Keys, right? Maybe. Let's start with stuff of not-so urban legend (and not-so-hot authenticity). Legend has it that Florida fisherman created Key lime pie in the late 1800s and sold it from the backs of their boats. Another frequent Key West story, according to *Southern Living*, is that it was invented in the 1890s by some woman known as "Aunt Sally," who "allegedly concocted the pie in the kitchens of Key West's Curry Mansion, where she had access to sweetened condensed milk." However, the *Miami Herald* says that sweet story has never been verified.

The website The Enlightened Mindset credits the invention of Key lime pie to Bill McAllister, born in Florida in the late 1800s. It says he grew up in an area known for its key lime groves and that he made it for his wife.

Sounds plausible—except for the fact we could not find McAllister's name anywhere else in connection with Key lime pie.

A recent pie fight originated with New York City website Gothamist. Per *Southern Living*, Stella Parks researched the subject while writing her cookbook, "Brave Tart: Iconic American Desserts." She consulted with Key West historian Tom Hambright on the oldest local recipe for Key lime pie. He could not find anything earlier than 1949, per the *Herald*.



Meanwhile, Parks found a nearly identical recipe, dating to 1931, that used lemons instead of limes. It's the same idea—a sweetened, condensed milk citrus pie—created by the Borden condensed milk company in New York City.

From there, the theory goes, the recipe for Magic Lemon Cream Pie "most likely made its way to Florida sometime in the 1930s and '40s. There, canny pie makers modified the recipe, swapping lemons for Key West's sweet-tart limes," Southern Living reported.

This left a sour taste with David Sloan, author of "The Key West Key Lime Pie Cookbook" and the force behind Key West's annual Key Lime Festival. Sloan told the Key West Citizen he has historical documents that show Aunt Sally was very real—and that she had access to condensed milk earlier than the 1930s.

We cry "Uncle" on Aunt Sally. Just pass us a slice.

Famous Amos Cookies

He was born in Tallahassee in 1936 (and moved to New York City's Harlem at 12). Although that's Wally Amos Jr.'s only connection to Florida, Floridians love to consider Famous Amos Cookies their own.

His life story—definite movie material—renders his birthplace all but moot. Per History.com:

Moved to Harlem to live with his Aunt Della. Got his GED while in the Air Force. Joined the William Morris Talent Agency in New York in 1957, working his way up from the mailroom to lead the rock 'n' roll department. Signed Art Garfunkel. Worked with the Supremes and Sam Cooke, among others.

Missed out on a job opportunity in Los Angeles, grew tired of show business, started baking his delicious, zero-preservative cookies to relieve stress using Aunt Della's recipe. Launched Famous Amos cookies in 1975 on LA's dangerous, prostitute-ridden Sunset Boulevard. Eventually got backing from Marvin Gaye and Helen Reddy, made \$300,000 in his first year and \$12 million by 1982—by which point he was a mainstay in Macy's Thanksgiving Day Parade. Made guest appearances on TV shows "The Ieffersons" and "Taxi."

That's when the cookies crumbled.

According to his son, Shawn, Dad wasn't much of a businessman and made some bad decisions. Wally Amos eventually lost his home and sold a majority stake to Bass Brothers Enterprises for \$1.1 million in 1985.

At last report Famous Amos, now 86, was operating a modest store called Chip & Cookie in Hawaii with a legacy that is forever secure. The

actually took place there for a while. shirt and hat he wore during his heyday are on display at the Smithsonian National Museum of American History.

The life of Wally

Amos, inventor

of Famous Amos

Cookies, is a rags-to-

riches-to rags story that is made for

Hollywood-and

INVENTOR ARCHIVES: JUNE

June 9, 1953: U.S. Patent No. 2,641,545 was granted to John H. Kraft for the "manufacture of soft surface cured cheese." He had filed for the patent in April 1951.

The process revolutionized the cheese industry. The invention summary says: "This invention relates in general to the manufacture of soft, surface cured, mold ripened cheeses such as for example, Camembert, Brie, and the like and in particular, to the provision of a soft, surface cured cheese whose mold paid may be readily removed."

Kraft was president and chairman of the board of the Kraft Foods division of Kraftco Corp. when he died in January 1972 at age 80. He also was vice president of the National Dairy Products Corp. and director of the National Cheese Institute.

Kraft was the youngest brother of James L. Kraft, who founded the Kraft Food Co. in Chicago in 1909. and succeeded him as chairman when he retired in 1951. The Kraft company marketed brands in more than 170 countries, with 12 of its brands annually making more than \$1 billion worldwide. Kraft eventually became

Mondelez International in 2012.

Selling Your **Prototype**

IT'S OK TO SPEND THE MONEY AND TIME ON DEVELOPMENT, PRE-PATENT; IN FACT, IT'S PREFERRED BY JACK LANDER

ATENTING OUR invention is typically our goal for two reasons.

First, we dream of licensing it and receiving periodic payments or an outright sale. We've heard accounts of inventors who have made millions of dollars from royalties.

Second, a patent validates our invention. We can claim to have invented something amazing, but the likelihood of us being the first to invent is not high. We usually discover this when we get our "patentability opinion" from a reputable searcher.

But our family and friends will stop winking at each other behind our back when we can show them our patent papers.

Sorry, Uncle Frank

Can we really make a lot of money from a simple patented invention? Definitely.

Ernie Fraze's story has been told in Inventors Digest before. The founder of the Dayton Reliable Tool and Manufacturing Co. in 1949, he was at a picnic when he discovered he had forgotten to bring a can opener. This began his

quest for a way to invent a can that could be opened without a separate opener.

Using tools from his company, Fraze invented and patented the pull-tab beverage can opener in 1963. (I'm sure you're aware that simple, one-piece invention is still around, 60 years later.)

But what about our more common experience? Let's say we've invested in a patentability opinion and maybe even a workable prototype—but the professional opinion is that we won't be able to get a patent due to the prior art the searcher found.

Well, your wise uncle Frank warned you that you were wasting your time and expense on a prototype, which you should have made after determining that your chances of getting a patent were pretty good.

Wrong!

Is your uncle Frank driving a new electric Mercedes? No, he's apparently content with his 5-year-old Corolla.

He doesn't understand that the process of inventing usually involves messing around with tangible parts in order to evolve an invention. Edison would have been the first to tell you the value of messing around.

(My patent on the first disposable laparoscopic surgical instrument made U.S. Surgical Corp. a pile of money, and it had only three parts. A competing model had 17 parts—way too complicated. I had spent 2 ½ months messing around with leaf springs in order to gain the essential simplicity.)

In any event, your evolved prototype may have

Small businesses are frequently wishing for a product that fits their skills and manufacturing capability. Your invention, even without a patent, may be just what one of the thousands of small businesses seeks. They may not have the budget to hire an engineer or product designer, but a potential product that is ready for tooling up may be attractive for a one-cost purchase.

Leading to other things

I probably told you in a previous article that I had a small manufacturing business years ago. I started it to provide an income and manufacturing capability so I could eventually produce my own inventions.

One of my early ventures was a small electrical device I named "Pre-empt," a device for pilots of private aircraft. Pre-empt would allow the pilot to listen to music on earphones but instantly cut off the music and allow messages from other planes or airports to have priority.

Only one problem: The several insurance companies I contacted wouldn't insure it for safety at any price. And insurance was mandatory.

The aircraft navigation and communication business I had contacted specialized in upgrading navigation and communication instruments in private planes. That nearly always meant making a new instrument panel for the plane. And they were paying outrageous prices to have them made by a company that was not conveniently located.

I took on the job of fabricating the panels, even laying out the openings for the former and new instruments. It wasn't mass production, but it was fun and paid well—even though my price to my customer was lower than its former source.

Some searching tools

How do you find a buyer?

Out of curiosity, I asked my ChatGPT (artificial intelligence app) to give me a list of five navigation and communication equipment sellers in Connecticut. It gave the five businesses with up to about 50 words describing each.

A small ad in the appropriate trade journal could land you a potential buyer. And a personal sales pitch could lead to the need for a certain product that you might invent on speculation.

One caution: Have your searcher verify that you won't be infringing on anyone else's patent before trying to sell your prototype. As the great Carl Sagan reminds us: "The absence of evidence is not evidence of absence."

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







Since 1985, Inventors Digest has been solely devoted to all aspects of the inventing business. Other national magazines merely touch on invention and innovation in their efforts to reach more general readerships and advertisers. Advertise with Inventors Digest to reach our defined audience.



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ChatGPT and **Digital Marketing**

HERE'S HOW THE ALPROGRAM CAN HELP YOUR SOCIAL MEDIA STRATEGY—BUT WITH IMPORTANT CAVEATS BY ELIZABETH BREEDLOVE

Y HARNESSING the capabilities of the recently emerging ChatGPT, inventors Can improve their digital marketing and better engage with potential customers on social media platforms. This article will show how to best leverage this artificial intelligence-powered conversational agent.

For those of you who have missed the last couple issues of Inventors Digest, ChatGPT is an advanced language model developed by OpenAI that is designed to generate human-like responses and hold coherent conversations. It has been trained on a diverse range of text sources, enabling it to understand and respond to a wide array of topics.

U.S. ASKS FOR CAUTION

In the first White House meeting of major AI chief executives since ChatGPT's rollout in November, Vice President Kamala Harris urged them to seriously consider the risks of automated textgenerating technology.

On May 4, Harris met with leaders of research laboratory OpenAl which owns ChatGPT—along with those at Google, Microsoft, and Anthropic, an Al startup. President Biden told the group, "What you're doing has enormous potential and enormous danger."

OpenAI has blocked the use of ChatGPT in seven countries: Russia, China, North Korea, Cuba, Iran, Syria and Italy. It also issued a list of forbidden use cases for ChatGPT, including those that contribute to child abuse, and "preemptively ruled out military and other 'high-risk' government applications," according to The Intercept.

> However, the nonprofit news organization added in a bit of skeptical commentary: "Like its rivals, Google and Microsoft, OpenAl is eager to declare its lofty values but unwilling to earnestly discuss what these purported values mean in practice, or how—or even if—they'd be enforced."—Fditor

Inventors can use the program to create targeted communications for social media or their website; write effective ad copy; or automate and personalize their interactions with potential customers.

Here are specific benefits you may derive from using ChatGPT.

Targeted digital advertising: ChatGPT can play a pivotal role in crafting personalized and effective advertisements. By analyzing user data and patterns, the program can generate dynamic advertisements tailored to individual preferences and interests.

For instance, an inventor who has developed a new line of eco-friendly fashion accessories can use ChatGPT to analyze user data and craft personalized advertisements for people who have shown an interest in sustainability, fashion, or related products. By delivering targeted ads that resonate with potential customers, inventors can significantly improve their conversion rates and return on investment.

Innovative content creation: Content creation is a crucial aspect of digital marketing, but it can be time consuming and challenging for inventors who are already focused on developing their products. ChatGPT can be a valuable asset in this regard, as it can generate high-quality content for various marketing channels—including blog posts, social media captions, and product descriptions.

Inventors can provide the program with guidelines and relevant information about their products, allowing the AI model to create engaging and persuasive content. Whether it's a captivating blog post about the story behind the invention or an attention-grabbing social media caption highlighting its unique features, ChatGPT

can streamline the content creation process, saving inventors valuable time and effort.

Real-time customer support: The ChatGPT API can be used to build a chatbot on websites and social media platforms to offer real-time customer support. It can handle frequently asked questions, provide troubleshooting assistance, and guide potential customers through the purchasing process.

By incorporating the program as a virtual customer support representative, inventors can provide round-the-clock assistance without requiring a dedicated support team. This ensures a seamless customer experience, enhances customer satisfaction, and fosters a positive brand image.

Tips for creating content

The goal is to write a query that provides the content you need.

If your query is too broad and isn't written clearly, you'll have difficulty getting the algorithm to write the right type of content for your needs. Always be as specific as you can; clearly define your query and provide as much context as possible.

Specify the type of content you need, the target audience, and any specific instructions or requirements. If you have a certain style, tone, or format in mind, provide ChatGPT with examples to help it understand and generate content that aligns with your expectations. Or, if you have guidelines or limitations you need to follow, communicate them clearly.

For example, if you need content within a specific word count or want to avoid certain topics, include these constraints in your query.

ChatGPT generates content within a few seconds. But once it's written, you'll need to edit and fine-tune it.

Remember that ChatGPT won't replace a good copywriter or marketer. Treat the program's generated content as a starting point, rather than a final product.

Edit and revise the content to ensure it aligns with your brand voice, messaging and objectives. You may also need to restructure and reorganize the content to ensure logical flow and readability, so consider adding subheadings, bullet points and paragraphs to enhance clarity and comprehension.

Sometimes content generated by ChatGPT can be repetitive, so you'll need to remove redundant sentences or phrases. Infuse your unique voice and brand personality into the content. Add personal anecdotes, storytelling elements or specific examples to create a connection with your audience.

Fact-checking is crucial. ChatGPT is not a search engine; it's simply a language model. Just as you shouldn't take everything Google tells you as factual, you can't assume that everything ChatGPT writes is factual.



Cross-reference data, statistics and claims with reliable sources to ensure accuracy and credibility. You can also encourage the program to cite reputable sources in its generated content—although a well-publicized recent episode indicates this is not foolproof, either. Specify the type of sources you prefer, such as industry journals, peer-reviewed articles, or established publications.

If your content requires technical accuracy, carefully review and validate technical terms, specifications or scientific concepts to ensure correctness.

More best practices

Generating content with ChatGPT is an iterative process. Experiment with different queries, review the output, and refine your queries accordingly to get the desired results.

Although the program can produce creative content, ensure that it doesn't compromise clarity and readability. Aim for a balance between engaging language and conveying information effectively. This will likely require some editing on your part.

Avoid generating content that may violate ethical guidelines or mislead your audience. Ensure that your content aligns with your brand values and the principles of honesty and transparency.

Leverage ChatGPT's pre-training and finetuning capabilities to optimize its responses. By providing it with relevant examples and feedback, you can improve the quality and relevance of the content it generates.

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.



MY EXPERIENCE WITH CHATGPT

The entire article under the main headline was started using ChatGPT—surprise!—although I wrote it and edited it to reflect what I know and have learned through my own experience.

Over the past month or so, I've experimented with using ChatGPT as a starting point to create content for my own clients. I've quickly learned that while the program can be an excellent place to begin, it doesn't come close to replacing a good copywriter or marketer. Although the platform did write the first draft of most of this article, it required heavy editing from me.

For example:

- I deleted a lengthy section about using it to create chatbots to manage your social media platform, because I felt it was confusing, unclear and unhelpful for this magazine's audience.
- I initially asked for 1,000 words, but only about half of what it wrote

- to begin with was usable for the direction I intended this article to go. Much of it was redundant or irrelevant to my audience. I'm learning that I need to ask for much more than what I actually need, whether I'm looking to hit a specific word count or I'd like a certain number of sections.
- The content it gave me initially did not include enough about best practices for using ChatGPT to create content, so I used a more specific query to get another 500 words on that topic to add to it. I've also started to learn what types

of content it writes well and what types it does not.

I quickly saw that the more specific my content needs are, the less likely ChatGPT will give me what I want.

For example, I asked it to

write a landing page for a product and gave it a similar product page as an example—and what it gave me was entirely unusable. Later, I asked it to write a blog post about how my target audience could use a different product, and the overall content was what I needed. But it had guite a few factual errors that needed to be corrected.

In other words, the more general the content you need and the more specific your query, the better luck you'll have with ChatGPT.

If you'd like to try the program for yourself, I suggest taking an hour or so to enter a variety of queries

> and see what content it gives you. Ask for content revisions, give it

> > suggestions, and take it from there. You should quickly begin to discover exactly how ChatGPT can be useful for your own business.





HOW WE DO IT







Industrial Design



Engineering & Prototyping



Manufacturing



Sourcing



Market Research



Crowdfunding (Kickstarter)



Digital Advertising & Marketing



Social Media Marketing



Public Relations

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



Bugs as Food? Boom!

BANGKOK MAN'S COMPANY WORKS TO MAKE INSECT-RELATED FOOD FOR HUMANS A TASTY PROPOSITION BY JEREMY LOSAW

THIVACH Pongsattasin says he has at least a partial solution to the global food crisis: insect food for people.

With the world at the front edge of a global food crisis, it is going to take a lot of innovation to keep us all fed in the next century. Protein is a particularly difficult issue, as raising animals takes a lot of land and energy to produce and has harmful environmental impacts. It is not scalable as the population heads toward 8 billion.

However, there is a possible solution hidden from plain sight.

Insects are everywhere. While many animals rely on them as their primary food source, humans have by and large eschewed them as a serious meal.

Pongsattasin—nicknamed Boom—and his team at Exofood Thailand are trying to change that by bringing tasty, nutritious, high-protein, insect-based food products to the masses.

Exofood Thailand, which Boom cofounded, is an insect food and product company based in Bangkok. It has an urban vertical farm that raises three kinds of insects: black soldier fly larvae,

crickets, and Dubia roaches. All are processed for human and pet consumption.

The company sells bags of insects as pet food and human snacks, and processes them into oils that are used as pet health supplements. Exofood is constantly innovating, even working with local chefs to create high-end dishes with insect ingredients. The company's products are currently only available in Thailand.

3 for starters

An exotic pet lover, Boom started his business from an issue he was having with his gecko.

His pet suffered with diarrhea, so he took it to a veterinarian for a diagnosis. After two weeks—and a \$500 vet bill—he found the problem: He had fed the gecko an insect that contained a toxin or salmonella.

At the same time he had an interest in social entrepreneurship and was thinking how insects might be a way to provide protein for the masses and bolster food security. He decided to set up an insect farm.

Black soldier fly larvae are raised on Exofood Thailand's vertical farm. The company works with local chefs to craft gourmet dishes that improve the appearance of insect-based food. In some cultures, larvae from the sago beetle are seen as a prized delicacy.

Below, left to right:







"Boom" Pongsattasin of Exofood Thailand had to overcome the stigma that insects are dirty. So he focused on making his farm a showcase of cleanliness, even allowing tours for the public.

"I just started from that. I think I can do it by myself. Very soon I opened a farm to raise the insects," he said.

He started with three different types of insects; the first goal was to raise high-quality insects for pets.

This was a great success. The Dubia cockroaches are like a superfood for pets because they are easier to digest. He gained a following selling them through Facebook, even through the pandemic.

Fighting perceptions

It was one thing to produce insects for pet consumption, but a much bigger challenge to get them into human food.

Boom had to overcome the stigma that insects are dirty and disgusting. So he focused on making his farm a showcase of cleanliness, even allowing tours for the public.

"The farming area has to be clean, has to be hygienic, and has to be fit to the city. That's why I just have the vertical farming in the city in Bangkok," he said.

"Then, when they visit our Exofood labs, they can change their mind, they can change the attitude because they can feel more comfortable. ... They can eat. They can smell. They can try the snacks."

Another issue for humans is the taste of insects. Boom found that like other foods, including coffee, taste can be manipulated in the preparation. Drying the insects at different temperatures can change the taste—low temperatures yielding nutting flavors and higher temperatures bringing notes of chocolate.

As with livestock, the food that the animals eat affects their flavor. Boom switched from feeding his mealworms rice to oatmeal to give them a better flavor. This has led him to create a diversity of flavors in the product line.

Growing possibilities

Boom's work with insects led him to more lines of innovation.

Talking to farmers across Thailand about insect cultivation, he uncovered a big problem for rural farmers. He realized that it is a challenge to get agricultural products like coffee processed and ready to sell, and farmers often have to travel long distances with their beans. It would save a lot of time and money to process the product on site, but remote farms often lack basic infrastructure.

"They have to travel after they gather the coffee beans over the mountain for more than 8 hours ... if they don't have to drive, it will save time and save money and reduce carbon footprint."

So he created a product called ExoPowerBox—a remote power station made from a shipping container with solar panels that provides up to 130 kW of power.

The work now for Exofood Thailand is focused on continuing refining the insect product for humans. Boom is working with local chefs that include Chef Pong, a contestant in "Top Chef Thailand" Season 1, to craft gourmet dishes with insect ingredients to level up the perception of insect-based food.

Other projects related to this include working on a way to automate the removal of legs from dried crickets to give them a better mouth feel for humans; working on exposing kids to insect snacks (their pallets are not normalized, and youths tend to be more open to trying his products); and working on a line of cat and dog treats to help expand his product line to non-exotic pets. €

Details: exofoodthailand.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



Unforgettable Reminder

HAVE YOU TAKEN YOUR MEDICATION(S) TODAY? WOMAN'S LABELING SYSTEM ENDS THE GUESSWORK

BY EDITH G. TOLCHIN

■ OR MANY, getting the hang of social media can be stressful. For others, it can be rewarding—like the day I was surfing through Instagram for inventions (bummer; "Shark Tank" was in reruns), and I landed a goldmine with tooktake.

The medication-labeling system was invented by Californian Leeanna Gantt, a cancer survivor.

Edith G. Tolchin (EGT): Did your background play a role in your invention?

Leeanna Gantt (LG): I was born and raised in southern California, where I went to college at Art Center College of Design. After college, I worked as a creative director/art director for advertising agencies.

After having my daughter, I decided to do freelance design work from home and not go back to the crazy schedule I had in advertising.

When my daughter, Riley, was in kindergarten, I opened a community art studio called Tinker. I loved having the art studio and being part of the community, but after about four years we decided that it was time to close up

shop so I could spend more time with my family.

> Then, when Riley was 10 years old, she decided to

start a charity called Rainbow Pack (school backpacks filled with basic supplies). It started out small and then became a huge part of our lives for the next eight years!

Since Rainbow Pack was a youth-led charity, I became the executive director so there would be at least one "adult" on hand for anything that required one. As Riley got older, my husband and I started a design and branding business together with the hope that we could grow it to the point where we could work together, full time.

We were finally able to make the leap to work together during the summer of 2017.

EGT: Please describe tooktake and your story behind it.

LG: Things were going well with our design business until a few days after Christmas in 2017, when I was diagnosed with breast cancer. I spent all of 2018 in treatment—which included chemo, surgery and radiation.

During my treatment—I am cancer free now—we had trouble keeping track of all the things that I had to take and use to manage the side effects from treatment.

On top of that, everything was in different forms: liquids, lotions, pills, ointments, mouthwash, and all on different schedules.



During her breast cancer treatment, Leeanna Gantt and her husband "had trouble keeping track of all the things that I had to take and use to manage the side effects from treatment."

I started making labels out of sticky notes to help us keep track of things. Then my husband, Brad, refined the design of my DIY labels into something that could be produced at some point.

By the end of my treatment, we had a really nice design, and a name for them. But I still wasn't sure that I wanted to run a business.

Then, I found out that I needed to take one pill every day for the next five to 10 years to help prevent my cancer from returning. I kept forgetting to take it—or worse, I wasn't sure if I took it or not, which was a problem because I couldn't take it twice.

So I started using my homemade labels again. That's when I realized that I couldn't be the only one who has this problem.

It turns out, I'm not!

Tooktake is very simple. It's an adhesive label with perforated tabs on the sides that you can pull off when you take a dose of medication or supplements.

One of my favorite things about tooktake is that it can be used on anything you want or need to use or take to stay well—not just pills. Tooktake lets everything stay in its packaging with the directions, warnings, expiration date and refill information.

EGT: When did you know you had the perfect prototype?

LG: It took us a long time to find someone who could make the labels. Once we found someone, it took several tries before everything worked properly. We knew we had a winner when the adhesive was just right, and the tabs were easy to remove without accidentally falling off.

EGT: Where are you manufacturing? Have you had any difficulties with manufacturers or supply chain issues during COVID-19?

LG: We are manufactured here in the USA, so we were very lucky and didn't have any big delays during COVID-19.

EGT: Is tooktake patented? If so, was that a difficult process?

LG: Tooktake does have a patent! I started trying to do it on my own, but I ended up working with a patent attorney who made the whole process very easy and resulted in a strong patent.



EGT: Where are you selling?

LG: You can purchase tooktake from our website—or Amazon, CVS & Walmart in stores and online, and in many independent pharmacies across the country.

EGT: Have you had any difficulties in the invention process?

LG: Since I have never invented anything before, every step of the process-prototypes, manufacturing, fulfillment and shipping—were new to me. So I have had to learn quite a bit, and retailers seem to speak in a completely different language and use a ton of acronyms. It was difficult to know what they were talking about at first.

But I am learning as I go. I have met lots of other inspiring founders who have been very generous with their time and answered many, many questions for me.

EGT: How are you handling your PR?

LG: PR is hard! Tooktake doesn't have a big budget, so I reach out to people who write about wellness products, female founders or inventors, and I share my story or product information with them. Then I cross my fingers and hope they reply.

This has resulted in several podcast appearances, placement in print and digital publications, and even interviews on CBS and NBC stations.

Tooktake labels make it easy to know whether you took your medicine or still need to take it. Just pull a tab when you take a dose so that later. you can know at a glance what you did.

INVENTOR **SPOTLIGHT**



Tooktake has four SKUs: daily, hourly, 10-day and monthly.

EGT: Are you planning any new products?

LG: I do have a new product launch coming soon that I am very excited about, but it's not quite ready to share.

EGT: What tips do you have for developing a new invention?

LG: I love sharing what I have learned so far! These are my three favorites:

There are no shortcuts when you are starting out. It just takes time. The stories you hear about inventions becoming "an overnight success" are usually exaggerated, and those companies have been around for seven, eight years or longer.

This is a practical tip: Don't order a lot of anything that is printed when you are first starting out. Order just what you really need, pay a little extra and see how it goes. As you grow, you will think of things you want to change, update, or have to change.

It's okay if things happen slowly. In fact, if you plan to grow slowly and steadily, you will build a stable foundation for your business—and most of the mistakes you make while you are learning will be small in scale. €

Details: tooktake.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).





PEAMESBOT/SHUTTERSTOCK

70 Years. 10 Traits.

RECALLING COMMON CHARACTERISTICS OF SUCCESSFUL INVENTORS I HAVE KNOWN BY LARRY UDELL

EVENTY YEARS.

That's a long time to mentor and work with inventors, to create so many new ventures with them. I can remember when inventors transformed into entrepreneurs and millionaires.

These success stories have basically the same ingredients—which is what prompted my writing this article for one of my favorite magazines. I have participated in Inventors Digest since its founding in 1985 by Affiliated Inventors Foundation founder John Farady. Joanne Hayes-Rines took over the magazine in 1987 and operated it for 30 years.

What I saw in my personal relationship with such world-famous creative individuals such as, Bill Lear, Jim Fergason, Forrest Bird, Bob Rines, Paul MacCready, Marty Cooper, Don Evans and Stephen Hawking was the commitment to the vision and patience to transform an idea into an invention, then into a product.

Their primary motive was the benefit their invention would provide to others.

Here are 10 common characteristics they had or have—some more valuable than others:

- Seeking the help of knowledgeable teammates. These members can have specific knowledge pertaining to the invention— and its transformation into a prototype and then a product. It helps to have a patent attorney and a knowledgeable mentor.
- Doing the necessary research on the market. Most important are similar or competitive technologies, or which companies would be interested in licensing (or other collaborative methods). Knowing your real or perceived competition and their IP can prevent potential future litigation, or lead to a licensing target for you.
- A personal quest to achieve success and be recognized by peers. This applies more to academic and research lab inventors who want to prove they were not crazy when they created their new product.

- A well-defined plan that requires detailing each step in the creation and potential commercialization process—a need to know all factors that will be critical in establishing a startup or attempting to license.
- A detailed knowledge of the immediate and long-range requirements for success. They sought to visualize all steps from today and beyond, and how to successfully transition whenever necessary.
- Understanding the required flexibility to adapt and change the course in order to achieve the objective. This is where the value of a team is critical.
- Not allowing negative outside influences to have any effect on the process, unless they come from a respected colleague. The ability to judge the reason for input and its potential value is important, along with the credibility of the provider.
- Prioritizing and re-prioritizing the target and time requirements. The process from invention to product requires a myriad of influences, from internal and external individuals and critics. Target dates need to be established.
- Having the individual and collective ability not to permit greed or personal gains to interfere with the focused objective. Successful inventors have a practical vision of the future and how their efforts will make a difference and create value for the recipients.
- · Always keeping family informed and involved, remembering that you cannot replace true love with wealth.

Larry Udell is executive director of the California Invention Center.and founder of the Licensing Executive Society, Silicon Valley Chapter. He is a teacher, lecturer and consultant who has created more than 35 corporations. He consults to Fortune 500 firms and smaller businesses.



INVENTOR/ENTREPRENEUR MOLLY WILSON, WHO COULD HAVE BEEN ON THAT PLANE, LIVES WITH ADDED GRATITUDE AND PURPOSE BY REID CREAGER

OLLY WILSON decided to change her life. Little did she realize that choice may have prevented her death.

Though proud to be a member of Sen. Paul Wellstone's staff for five years, at 28 she grew curious about other challenges. On Oct. 25, 2002—one week after Wilson left to open her first retail business—the Democratic senator from Minnesota called her from Saint Paul Downtown Airport to congratulate her as she prepared for a grand re-opening at her Hallmark store.

Sen. Wellstone, his wife, Sheila, and his daughter, Marcia, were about to fly with campaign staff members Will McLaughlin, Tom Lapic and Mary McEvoy. Their destination was Eveleth, Minnesota, to attend a funeral for the father of longtime Wellstone friend Rep. Tom Rukavina, DFL-Virginia.

Sen. Wellstone "passed the phone around the plane as they were sitting on a tarmac with a flight delay due to fog," Wilson recalls. "He cared so much about others that he took a moment when he likely had 20 calls to make, just to wish me luck that day."

Not long after, as Wilson prepared for her store event, a customer walked in the door crying and then ran up to her for a big hug. "I'm so sorry," she told Wilson.

Her mentor and hero, a passionate champion for the underrepresented known for "The Magic Green School Bus" that symbolized his campaign, was dead. The six-person Wellstone "family" and both co-pilots died in a plane crash just 45 minutes after Wilson's conversation with the senator.

She said she was the last person not on the plane to have spoken with him.

The National Transportation Safety Board report on the crash said the chief pilot initially decided not to fly after receiving a weather briefing that morning—but reversed his decision. The NTSB cited pilot error in the crash.

Twenty-one years later, "The truth of my reaction is really hard to think about, to be honest," Wilson says. "I collapsed, got sick and prayed."

Molly Wilson, founder/CEO of molly&you and Lacsnac, will forever be affected by Sen. Paul Wellstone's inspirational life and tragic death.



Her emotions ran the gamut from shock to devastation to survivor's guilt. Had she not recently left Sen. Wellstone's camp, could it have been her on that plane as well?

"Well, I left two weeks before his third re-election campaign. A great woman, Mary McEvoy—a professor at the University of Minnesota—stood in for me those last two weeks and was on that plane. She was so honored to take a brief sabbatical to step in.

"It's hard for me to think about Mary's loss of life because I was not on the plane that day."

If you don't ask...

Although she was born in Harrisonburg, Virginia, and grew up in rural Iowa, it may have been inevitable that Wilson would meet the personable and empathetic senator from Minnesota.

"I am all about real connections with people, working hard for what you want and always being thankful," she says.

"In college, I studied what I was passionate about—women's issues. I was in graduate school while driving in Minnesota when I saw a sign for Senator Wellstone's office. He was an author of the Violence Against Women Act.

"I've always been confident and outspoken, so I pulled in and walked inside! I asked the receptionist if I could give them some feedback—a confident kid sharing her opinions. I suggested there was a lot more the senator could be doing with the Violence Against Women Act.

"It just so happened that the senator's wife was walking by and heard me and said: 'What is it that you think we could be doing better?' She

> and I walked to grab a coffee, and she listened to my ideas! She said, 'My

husband has to meet you."

Two weeks later, Wilson was hired to direct community outreach across the state of Minnesota on women's issues.

Business hallmarks

In many ways, being around the senator for five years helped Wilson improve her already formidable people skills—which have boosted her tremendously as an innovator and entrepreneur through highly successful pursuits that have included but are not limited to:

- Leading a Hallmark Gold Crown store that eventually became the largest of its kind in America;
- molly&you, a popular gourmet breadmaker;
- BEST of Show, industry disrupting high-energy showrooms where American wholesale manufacturers and leading brands sell products to a robust group of American and international wholesale buyers;
- Big L. Brands, a small business investment company; and
- November 2022 startup Lacsnac, which makes GMO-free, gluten-free and dairy-free lactation-enhancing food.

With Sen. Wellstone, "Our focus was always on listening first and then problem solving through federal legislation. ... In the van, he'd make us stop if he saw any children having a lemonade stand or car wash. I cannot tell you how many times we were late because we stopped to support a roadside endeavor."

They shared the kind of bold, can-do personality that had prompted her to walk into a senator's office as a college student and make suggestions to accomplished strangers. Wilson thinks big, and her successes reflect it.

She wanted to own a Hallmark Gold Crown store—privately owned and carrying premier Hallmark items such as its Christmas ornaments. Wilson's status as a Gold Crown dealer meant she has support by way of financing, point-of-sale systems and customer data management.

That doesn't mean raising capital for a business is ever easy. Wilson was undaunted.

"I'm a friendship maker. I love making friendships and give and take to receive funding! I have

Molly Wilson, flanked by Sen. Paul Wellstone and his wife, Sheila, at this October 2002 charity event, left his staff two weeks later. A plane crash killed the couple, their daughter, three staffers and two co-pilots on Oct. 25, 2002.



"It's hard for me to think about Mary's loss of life because I was not on the plane that day."

raised money from friends and family, leveraged my own bank accounts for collateral—always scary—and during my time as a retailer, I worked with my banker to learn from him to grow.

"The more I showed I was willing to learn and keep my pay low while I had debt, the more my community bank was open to increasing my lending."

Success the hardest way

Wilson has an unconventional, one-word explanation for how her Hallmark Gold Crown store became America's biggest.

Grief.

"I think that my growth into a megastore honestly came out of grief. When tragedy and complex grief strikes—the kind of grief I

MOLLY WILSON

Birthplace: Harrisonburg, Virginia

Current home: Boca Raton, Florida

Family: Husband Dean; children Wilson,

Sami, Brittany, Brooke; dog Koa

Education: Bachelor of Science, Women's Studies and Social Work, Masters of Science in Social Justice, St. Cloud State

University

Hobbies: Golf (went to college on a golf scholarship), travel, great wine and pilates

Favorite food: Sushi by day, ice cream

by night

Wilson (right), shown with molly&you CEO Mercedes Barlow, makes it a proud practice to hire moms and other female employees.



experienced with the death of Senator Wellstone and my coworkers whom I loved dearly—we all react differently.

"People often lose themselves in something. It's a mechanism that protects a person from the darkness of the struggle.

"I now know that I deep-dove into building something during my grief. To go from a 1,500-square-foot store to a three-story, 6,000-foot-per-level operation is a really dangerous and ridiculous thing to do, to be honest.

"Day and night for two years, it became my focus and where I channeled my energy, probably largely to not feel the pain. Ultimately it was part luck, part grit and determination and part relationships that made this mega-store happen."

Admittedly, her prodigious sales and creative talents also came into play: "Hallmark used to hold top volume sales contests for store owners. The joke was that 'Why bother? Molly will win.' ... But I never feel that I'm in competition with anyone but myself."

She says she became the top store by becoming a great product buyer—20 percent of her store was Hallmark product; the rest, she curated and focusing on two things: the customer experience and creating a fun and desirable work environment for employees.

Sounds like her time working for Sen. Wellstone.

Time to pivot

About 10 years ago, Wilson had a realization that is common for megacreators. She had to create something new again.

She sold the Hallmark Gold Crown store to two women who worked for her and started her own bread company.

"There comes a time when I look at a creation and the community I have created, and it feels perfect," she says. "That's the moment when I know that I succeeded, and instinctively I know I'm ready for the next creation. That is when I know that it is time to take a business and find the next great owner."

She has always loved homemade breads. Because Sen. Wellstone was passionate about farmers and farm workers, "I always got great

produce and homemade breads and jams, because over the years we stopped at more roadside vegetable stands than I can count."

But the most direct impetus for molly&you came from one of her Hallmark employees, a high school teacher.

"Mrs. Nichols kept saying to me, 'Molly, you have got to try this beer bread from the Clay County Fair. There are always lines, and the young mom making it is so sweet.' Finally one summer, I tried it and I loved it!"

So did her customers, who were willing to pay for it. "I approached the young mom from the fair, Amanda, and told her that I thought her mix had great potential. I mentored her for two years and helped her get the bread mix into other small shops. ... But her interests weren't in growth, so she asked if I'd buy it from her and I could create a company and she'd make the bread mix. That's how we started."

Before long, Amanda was teaching her her secret recipe. Soon they were creating other flavors of beer bread mixes.

"When I knew it was time to sell my store, I decided that I'd really give this bread thing a go. I'd figure out how to mass-produce mixes of bread and developed a growth strategy to sell the product to retailers."

That first year, 2013, the beer bread mix was sold in 40 stores. With more than 60 products, molly&you gourmet food mixes are now in over 4,000 retailers and online, including Amazon.

"I never thought I'd ever be a food manufacturer," Wilson says. "But when the door opens, I just have to rush in."

She credits the company's success to an environment in which family needs are respected to the point where "no one will miss anything important in their lives or the lives of someone they love, and in turn they will 'bring it' when the company needs it most."

She is also focused on what she calls "deep diving into missteps." Although this can sometimes be painful, "When an organization is efficient, everyone is freed up to enjoy their day, have positive interactions with one another and customers and that makes for a great place to work every day."

Bathroom brainstorm

By now, you understand that Molly Wilson's relationships and experiences often lean toward the incredible. So it may not surprise you that her recent startup originated in a restroom in Las Vegas at 5:30 a.m.

"I was traveling and had an early flight. I went into a restroom and saw a mom sitting on the floor with her breast pump plugged into the wall. We started to chat.

"She told me she had just returned to work and she was tired and not keeping up her milk production and she might have to stop. We talked about supplements. I gave her some advice on other foods to add into her diet that help boost production.

"Upon leaving, I gave her a molly&you Microwave Mug Cake and told her I owned this company, and she could have a treat when she went home. She said, 'This chocolate brownie looks amazing. Do you think my breastmilk supplements will work if I crack them open and mix them in here?' I said yes."

Then she turned the package around and noticed they aren't gluten free, and they have a lot of calories. When Wilson asked her if she had tried any of the lactation cookies currently available, she said no—"they are all just unhealthy cookies."

Wilson left that restroom and felt "1,000 light bulbs above my head."

She spent the entire trip home researching, and found the woman was right. Wilson spent the next six months creating gluten-free items, with only purposeful ingredients known to increase breastmilk production in nursing moms. She surveyed mothers, sent out samples and got incredible feedback.

The brand launched in November 2022, with Lactation Coffee and Lactation Overnight Oats. In early April, Lacsnac (lacsnac.com) launched ready-to-microwave, soft-baked gooey lactation cookies and brownies (in six flavors) in a disposable cup. In the first month, Lacsnac cookie cups became a top 10 cookie mix on Amazon.

Wilson says all her businesses relate to continuing the mission she was on while working for Sen. Wellstone.

"Our work was focused on women's issues. I love being a job creator for women, supporting women-owned retailers and now with Lacsnac—bringing help to every mom who is sitting on her couch in tears because breastfeeding can be just so hard in every way.

sitting on her couch in tears because breastfeeding can be just so hard in every way.

"I truly want to always keep making a difference in the smallest ways I can, everywhere I can." •



Collaborate, or Not?

HAVING AN INVENTING PARTNER CAN ENHANCE CREATIVITY AND RESULTS—BUT IT'S NOT ALWAYS THE ANSWER

BY APRIL MITCHELL

ECAUSE INVENTING on your own can leave you feeling lonely or stuck on a project at times, collaboration can be a good way to change things.

Though there are always pros and cons, I think the former outweigh the latter and that everyone should give collaboration a try at least once. You never know what ideas you may unlock when working with another inventor.

The positives

Collaborating with another inventor should be a fun experience. It is great to bring together two different people who have varied backgrounds, experience and expertise to see what they can accomplish.

Two inventors together, combining their energy and knowledge, can make for a dynamic duo. Feeding off each other's sparks of creativity and inspiration can create new ideas that a solo inventor would most likely not create alone.



In my experience, working with a partner allows us to crank out ideas faster, mold the start of ideas into something completely different, and fine-tune ideas already begun by one of us.

Gaining another perspective or feedback can help skyrocket a good idea into a better one. The workload is typically divided, which can allow inventors to lean into their strengths or expertise as well as help fuel you through more concepts faster.

As an inventor, it is important to pitch or present good ideas—and the amount of ideas you presenting is equally important. With more concepts finished and ready to pitch, your chances of finding a hit will be greater.

The negatives

A collaborator can change his or her mind about details on a project at any time.

Even if both inventors agree about sharing the workload, royalties, or what the end project is supposed to be, a partner can go "rogue" on you and do something completely different, or go against the agreed-upon path. For this reason, it is a good idea to get things in writing or make a simple contract if possible.

Another possible drawback is that everyone has different priorities and schedules. You may be waiting for your partner to complete his or her part of the project so you can move on with yours; worse yet, the partner may not pull his or her weight, and you end up doing everything.

Be upfront with your partner about each other's schedule, workload and expectations. This will help you know whether this project will be a priority for him or her.

Tips from experience

I think it's important to find and decide which projects are best to work on with another inventor—and which projects you think you have down solid and can do on your own.

Before getting started, it is great to meet with the other inventor in person or online to talk and get to know each other. See if you think you will work well together. Learn about your potential partner's strengths and what part of the inventing process he or she enjoys.

Once you find a good match, decide on the category and industry you want to work in together, as well as whether you want to license the concept or manufacture it.

Sometimes, people may consider collaborating when there is an item such as a prototype or video that is an expense. I recommend not collaborating if it is solely for a service with which you need help. It is better to pay someone upfront for work—such as on a prototype or Sizzle video—than to pay that person half your royalties for years to come.

Open your world!

I have collaborated on projects many times with other inventors. In fact, I have enjoyed it so much that I would say about half the projects I am working on are with other inventors.

Sometimes, one of us has the start of something or a basic idea and we go from there; other times, we get started with a brainstorming session. It has worked well both ways and has resulted in some wonderful concepts.

I have also had some difficulties when collaborating. It is just going to happen.

But when collaborating with another inventor, you feel like your world is not so isolated anymore. You open yourself to new adventures and ideas that just needed a little help from a friend to achieve possible greatness.

May collaboration inspire you, and help you stretch and grow as an inventor. $\ensuremath{\mathfrak{O}}$

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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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:

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Best wishes, Jack Lander

PART 2 OF 2

Open Source, Open Possibilities

FREE HARDWARE AND MECHANICAL TOOLS HELP FUEL THE INNOVATOR IN US BY JEREMY LOSAW

HE OPEN-SOURCE world is a vibrant community of hackers and coders whose work helps keep the modern world working.

This was evident when I attended the Open Source 101 conference in Charlotte in March. The all-day affair was about open-source software, how to use it and how powerful it can be. Hundreds of developers from around the area converged on the UNCC campus to participate in conference tracks related to development, technology and processes.

I am not a software developer by any stretch of the imagination. So the conference was illuminating in that I did not know the depth in which open-source software and tools are embedded in our day-to-day lives—and how important it is to have an inclusive community to make products and tools that work for all of kinds of people.

In the first installment of my two-part series on open-source tools, I discussed the movement's development and history. Here, I will discuss different types of open-source tools and how to use them in physical product development.

Types

The three types of open-source tools and

and mechanical. Although the open-source movement started exclusively with software, hardware and mechanical projects have been just as important especially with the rise of IoT

and connected devices. I will focus on these two here because they relate more closely to physical product development.

Mechanical open source

These tools can come in the form of CAD files or physical parts themselves.

There is a whole community of CAD junkies who model different parts and systems from the real world and post them online. GrabCAD is one of the most vibrant communities where a quick search will help you find practically any type of part. The CAD files can generally be downloaded for free and used in your own projects or modified freely to suit a program's needs.

Parts vendors such as McMaster-Carr also offer CAD files for many products in its catalog that can be used to assess fitment and suitability in a design; this way, they can be "speced in" from the beginning or are free to modify. Some CAD files can also be purchased.

Craft marketplace Etsy is a good place to find patterns that, for a nominal fee, can be purchased for download and are ready to be laser cut or 3D printed or modified as required.

There are also open-source mechanical elements that can be used for building prototypes.

The aluminum extrusion system 80/20 and its competitors are a great example. These are aluminum rods that have an interesting cross-sectional shape that allows them to be easily joined together with screws and brackets. A host of accessories such as hinges, door panels and rotational

products are hardware, software

The CAD file for

this scale model greenhouse was

on Etsy and then heavily modified. It

also includes part

files downloaded

from GrabCAD to save modeling time.

The parts made

IoT workshop.

from this CAD will

be used to teach an

built by starting with

a CAD file purchased

There is a whole community of CAD junkies who model different parts and systems from the real world and post them online.

elements allow anything from tables to complex machines to be made with stock components.

CAD files for all of the parts are readily available, so you can fully design and customize your product before building it for yourself or making something that can be resold to others. At Enventys, we have often used aluminum extrusions to build test rigs, early-stage prototypes and trade show demos.

Hardware

Myriad open-source hardware tools and parts are available. This is a double-edged sword; the abundance can make it hard to pick which is appropriate for your application.

The original and best-known, open-source hardware solution is the Arduino. In reality, Arduino is not just one thing but a series of microcontrollers and IoT-enabled hardware that comes in a variety of specifications. The one most people are familiar with is the Arduino Uno, which for most applications is the best place to start.

The Arduino has been around for almost 20 years. Due to its ease of use and convenience form factor, it has long been the de facto microcontroller solution for makers and innovators.

Thousands of libraries and sample projects exist on the internet that are available to download and try, and to modify for personal use. The great thing about the Arduino Uno is that it is based on a lowcost Atmel chip that can easily be manufactured at scale for a reasonable cost. And, because all the schematics are available, prototypes that are made to work on the commercially available units can easily be reconfigured for custom solutions.

Adafruit and Sparkfun are two other suppliers that offer great open-source solutions.

Adafruit has a wonderful line of boards, both for educational and development purposes. Its Feather platform boards are half the size of an Arduino and small enough to fit in many prototypes. At Enventys, we often use its ESP32 Feather boards for early-stage prototyping before we are ready to build custom PCBs.

Sparkfun, similar to Adafruit, offers a library of open-source designs that carry no license to

use, modify and deploy in your own designs.

We're glad you're here!

Legalities

In general, open-source mechanical designs and hardware are free to use for personal projects and legal to

modify and sell.

A snippet from the Sparkfun website reads: "Our products and resources carry no patents, so anyone can use, modify and even sell them. Madness, you say? So far, so good.

"Being open source encourages people to share and learn from each other. It also forces us to focus on what we do best and constantly innovate. In short, it makes us better, for you and for the world."

However, not everything is this transparent. You must conduct due diligence on open-source hardware, parts, CAD and code you are using, and ensure you are building your product from a legally allowed starting place.

If you are using open-source CAD or purchasing a design that you intend to modify, make sure the original creator has given you explicit written license to use, modify, and sell the parts-and understand if any royalties will be due upon sale of product using those original designs.

Much available open-source software has a "copyleft" license—which enables you to use, modify and sell products with it—but also obligates you to keep your modifications open. This may or may not work for you.

If you have lingering questions about what or how you are using, contact an IP attorney for clarification.

Above: Events like Open Source 101 can provide valuable insights into the open source community.

Left: This prototype of a water plant Tamagotchi was created using the **Adafruit Circuit** Playground open source hardware and coded with free software tools.



Which Protection for You?

ANSWER THESE 11 OUESTIONS TO SEE IF YOU FALL IN THE PATENT OR TRADE SECRET CATEGORY BY LOUIS CARBONNEAU

E DO a fair amount of strategic IP advisory work at TangibleIP, and a recurring theme with clients is always how and where to draw the line between patent and trade secret protection.

You may ask yourself the same question. Is there even a time nowadays when it makes sense to favor patent protection over keeping things internal?

It is a legitimate ask.

But remember that patent protection lasts for 20 years, and there will always be ebbs and flows over a two-decade period as to how well (or not) these rights can be protected. For instance, there was no impact from the Patent Trial and Appeal Board and no *Alice* doctrine just 10 years ago, and no one knows what the legal environment will look like in 3-5 years.

So I tend to look at patents the same way I have looked at my now-adult kids over the last 20-plus years.

There were times I would probably have preferred to deny being related to them (mostly during their teenage years) ... only to show them off with a beaming smile a few years later after they had accomplished some important milestone, such as their graduation.

Similarly, one needs to take a long-term view when building a patent portfolio. I have commented in the past on the fact that most patents that are being transacted (and later litigated) are actually between their 12th and 17th year of patent term.

Conversely, and although trade secret protection is in theory indefinite in time (think Coca-Cola recipe), it is extremely difficult to keep something really secret nowadays. And once that secret is out—whether by accident or through some nefarious act—you cannot put that genie back in the bottle and it is now part of the public domain for anyone to use for free.

Below is a scorecard I have used for years with our clients. It provides a useful scoring system

that helps to rapidly determine which protection might be the most appropriate in specific circumstances: (Note: I didn't create it and I honestly do not remember when I first saw it 10-plus years ago.)

- Is development itself unlikely to be a commercial product or the subject of licensing? (On a scale of 1 to 10, how unlikely—with 10 being the most unlikely?)
- How little of a competitive advantage would be provided if the company maximized exclusivity? (Again, on a scale of 1-10—with 10 being the very least.)
- How much of a competitive disadvantage would it be if a competitor obtained exclusivity? (10 being very little)
- Is it likely the commercial significance of the development would be limited in time? (10 is the strongest possible no.)
- Is it likely one could develop alternatives, i.e. "design around"? (10 the most likely)
- Can the nature of the development be ascertained from the commercial product? (10 the most unlikely)
- Would disclosure of this development require or permit access to other, unprotectable information? (10 the strongest yes)
- Is it likely others will independently arrive at the same development? (10 the most unlikely)
- If a patent were obtained, what are the chances of validity being upheld by a court? (10 the very lowest chance)
- Will dissemination of the development from within the company be difficult to control? (10 the least difficult)
- Would it be difficult to determine if competitors are using the development? (10 the most difficult)

Once you add the scores, you usually end up with either a very low or very high score. If the sum approaches the higher end of the scale (above 75), trade secret protection would seem



I tend to look at patents the same way I have looked at my now-adult kids over the last 20-plus years (a longer-term view).

favorable; a sum at the lower end (below 45) would suggest that patent protection would be more advantageous.

In my experience, the choice between the two ultimately hinges on detectability.

Remember that a patent is a negative right, i.e., the right to exclude others from practicing the invention (though in the United States, it is more akin to a right to sue infringers for damages).

Therefore, you can only police what you can detect. If you cannot observe what an AI engine or some other cloud-based black box service is doing, for instance, or if your patent covers a manufacturing method and you cannot access your competitor's site (unlikely), maybe it makes little sense to disclose to the world via a patent application how your years of trials and errors have led to a given invention.

4 suggested protections

Each situation is unique. There is no "one-sizefits-all" advice.

Having said that, the closest thing in my view that one can do to protect most rights and keep all options open while deferring costs, gathering information and gaining clarity on the right long-term path is:

- 1. Document each innovation (which you should do if you want to prove later than something was proprietary to the company);
- 2. Convert it to a provisional patent and file it as soon as possible (and file revised versions along the way);

- **3.** Refrain from disclosing it to anyone (even after filing) who is not under a nondisclosure agreement and give yourself up to a full year to refine it, add new subject matter, gather data points and conduct a patentability assessment via a prior art search;
- **4.** Before the 1-year deadline, determine whether to keep it as a trade secret (in which case there is nothing to do, as the provisional filing is deemed abandoned before publication) or file a non-provisional patent either as a U.S. nonprovisional or in conjunction with or solely with the Patent Cooperation Treaty (international), while preserving the earliest filing date as priority against intervening prior art and pushing out most prosecution costs by a few years.

Do not take this as legal advice, of course; circumstances vary. Always consult with a professional beforehand. But there is a good chance he/she will agree with that suggested path in most cases.

If you are being told to simply file a nonprovisional patent (which they will be happy to draft and prosecute for you for a fee) and forego any prior art search, I suggest you look for a different firm! €

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.



Main U.S. IP Foe: Us?

AMERICA MUST FIX ITS SYSTEM IF IT WANTS TO REDUCE CHINA THREAT, PATENT EXPERTS TELL SENATE SUBCOMMITTEE PANEL

BY EILEEN MCDERMOTT

All Eye on Washington stories originally appeared at IPWatchdog.com.

■ HE UNITED STATES must clean up its own IP system at home in order to begin addressing threats from foreign competitors like China. That was the conclusion of a panel of patentsavvy witnesses during a recent hearing by the Senate Judiciary Committee's Subcommittee on Intellectual Property. Much of the hearing, "Foreign Competitive Threats to American Innovation and Economic Leadership," focused on the threat from China, particularly in the realm of trade secret theft and counterfeits.

IP Subcommittee Chair and Sen. Chris Coons (D-Delaware) noted that four-fifths of all counterfeits originated in China in 2021. China has also used legal means to gain an advantage, such as manipulating standard-setting bodies and flooding the U.S. Patent and Trademark Office with IP applications.

Although other countries, such as India, were mentioned, it was clear that the subcommittee's focus was on the potential exploitation by the Chinese government of what Coons dubbed the "slipping" U.S. patent system.

Internal U.S. issues

Both Coons and Senator Thom Tillis (R-N.C.), ranking member of the subcommittee, also stressed that the lack of predictability in the U.S. system—especially in areas such as patent eligibility law, the Federal Trade Commission's recent proposal to eliminate noncompete agreements, and the current U.S. administration's support for a TRIPS IP waiver—is a big part of the problem.

(Editor's note: Noncompete agreements stop workers from moving to competitors or starting their own similar businesses.

The TRIPS [Agreement on Trade-Related Aspects of Intellectual Property Rights]

waiver was advanced by the governments of South Africa and India to the World Trade Organization to waive intellectual property rights protection for technologies needed to prevent, contain, or treat COVID-19 "until widespread vaccination is in place globally, and the majority of the world's population has developed immunity." Many have argued that this waiver destroys the incentive to innovate, and that its premise ignores logistical issues.)

Mark Cohen, the Asia IP project director at the Berkeley Center for Law & Technology, told the subcommittee: "China's rise did not occur overnight. Rather, we have made profound mistakes in not identifying China's increasing innovative capacity and we need to proceed now without the bureaucratic myopia, antique organizational structures and indifference to data that have haunted prior administrations."

Cohen identified three immediate steps the U.S. government should take:

- Fill the still-vacant position of intellectual property enforcement coordinator, establish a deputy USPTO director for international affairs, and define the role of the solicitor general and/or the USPTO in educating the courts when they come into conflict with actions from Chinese courts:
- Strengthen the U.S. IP system by fixing eligibility issues, fixing low-quality trademark filings from China, having China disclose government subsidies for USPTO filings, and reconsidering the TRIPS waiver;
- Take a whole of government approach to the problem by creating a task force of leading tech executives, academics and officials to address the multidisciplinary challenges.

Patrick Kilbride, senior vice president of the U.S. Chamber of Commerce's Global Innovation Policy Center, also focused on the domestic threat of IP policies that weaken rights—such

as support for the TRIPS waiver, abusive practices in third-party litigation financing and the FTC's proposal on noncompetes.

Kilbride further noted that the threat of streaming piracy cost the United States 290,000 creative professional jobs in 2020 and \$30 billion in revenue for those affected, while economy-wide, it cost up to 500,000 jobs and \$115 billion in GDP.

"The U.S. government does not currently provide the tools to shut down foreign-based infringing websites," Kilbride said.

The China syndrome

Matthew Turpin, visiting fellow at the Hoover Institution and senior adviser at Palantir Technologies, also focused on the red flags missed along the way with respect to China's strategy to overtake the United States in key tech areas via IP.

Referencing the Commission on the Theft of American Intellectual Property that was formed a decade ago, as well as the Office of the U.S. Trade Representative's 2017 investigation under Section 301 of the Trade Act to examine unfair trade practices by China, Turpin said:

"The IP commission, the Section 301 Investigation and dozens of criminal prosecutions by the U.S. Justice Department over multiple administrations expose a truth that many have been reluctant to acknowledge: The United States is the victim of a comprehensive and intentional campaign by the People's Republic of China involving criminal acts, espionage, market manipulation and government policies which result in grave economic and national security harms."

Turpin said that in order to appear as though it is playing by U.S. democratic rules, which would undermine its system, China has chosen to "compete in a very different way." He added: "We're on a pathway to a much more turbulent relationship with [China] than even what we see now."

Cohen said the United States "relied a lot on platitudes" when it came to China.

"Frankly, we assumed too much. We assumed the internet would create open and democratic societies. That is not true; it can equally be used as a tool of oppression.



Two U.S. senators said that the lack of predictability in the U.S. IP system is a big part of the problem.

"We assumed that when a country begins to own IP it would protect IP for everybody. We applied general perceptions of the rest of world to China and found it did not quite work the way we anticipated."

Other issues addressed by the senators and witnesses included ensuring more transparency from China by utilizing existing tools under the World Trade Organization's TRIPS agreement, which says that final judicial decisions should be published; coordinating consistent views on IP across government agencies; creating a higherlevel IP position in the U.S. government to help with that coordination, and adding a standing requirement for cases before the PTAB. €

Eileen McDermott is editor-in-chief at IPWatchdog.com. A veteran IP and legal journalist, Eileen has held editorial and managerial positions at several publications and industry organizations since she entered the field more than a decade ago



Scary Stigma

CIPU SUMMIT ADDRESSES AWARENESS GAP THAT MAY PREVENT INNOVATORS FROM REALIZING IP BENEFITS BY STEVE BRACHMANN

N MAY 2, Northeastern University hosted the IP awareness and literacy organization The Center for Intellectual Property Understanding for its sixth Intellectual Property Awareness Summit: "Bridges, not Barricades."

More than 120 people attended, including 80 in-person attendees and a few dozen

> virtual participants. The one-day conference was kicked off by a keynote address from Kara

Miller, columnist of "The Big Idea" for the Boston Globe and founding host of the public radio show "Innovation Hub." She shone a stark light on the stigma often attached to IP rights and how that stigma causes the next generation of innovators and creators to

miss out on the benefits of intellectual property.

"In many ways, young people are exactly the audience you want to talk to about the power of creativity—whether that creativity is in fashion, music, tech startups or videos," she said.

"But the system that protects those creators is rarely discussed. And it means that the money that could flow to creative people often never does—especially to people who don't, in the general course of their lives, encounter IP lawyers."

Wakeup call

A recent study on IP awareness and attitudes published by the United States Intellectual Property Alliance, which showed low levels of IP understanding among American consumers,

was the focus of the first panel. Other topics included strategies for introducing IP topics into educational curricula as early as grades K-12, as well as personal success stories from several innovators of diverse backgrounds highlighting the importance of proper IP enforcement.

Headlining the day's discussion was a panel who laid bare the importance of fixing uncertainty in the U.S. patent system to meet the significant national security threat posed by a technologically advancing China. This panel consisted of several thought leaders in patent law, including Andrei Iancu, former director of the USPTO and cofounder of the Council for Innovation Promotion.

Iancu, in particular, drew a stark vision of a future in which the latest advances in telecommunications, geolocational services and other technologies with obvious military applications are more quickly grasped by our nation's most significant rival. He said this reality could play out if venture capital continues to view U.S. patents as an uncertain investment.

Bruce Berman, CIPU founder, summed up the conference's purpose.

"If the goal of the USPTO and the IP system is to be more inclusive, educating audiences about how it operates and what it impacts is essential. If the U.S. wants to remain competitive in innovation and creativity, the certainty of and access to IP rights will play a major role. Rule of law is key to creativity and investment." ♥

Steve Brachmann is a freelance writer located in Buffalo., N.Y., and is a consistent contributor to the intellectual property law blog IPWatchdog. He has also covered local government in the Western New York region for The Buffalo News and The Hamburg Sun.



"The system that protects ... creators is rarely discussed. And it means that the money that could flow to creative people often never does especially to people who don't, in the general course of their lives, encounter IP lawyers." —Kara Miller

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INVENTIVENESS

IoT Corner

The Matter protocol, which seeks to create a unified IoT standard to ensure interoperability between devices—especially in the smart home category—has gotten a lukewarm reception so far in the industry.

The protocol was launched in late 2022. It was hoped this would unite the IoT world, and a glut of compatible devices was expected to hit shelves in the first guarter of 2023.

On the plus side, Nanoleaf recently announced Mattercompatible smart light bulbs and light strips, and Yale has Matter-compatible door locks. However, other big IoT players such as Belkin have so far eschewed the protocol in their Wemo line, and Wyze has not released plans for compatibility within its smart home portfolio. —Jeremy Losaw

Wunderkinds

Three eighth-graders from Mt. Everest Academy in San Diego won the 2022-23 Jacobs Team Innovation Challenge, which honors teens who develop solutions aligned with UN global goals.

> More than 2,900 students from 18 countries participated. Identified only as Elizabeth, Malia and Miranda, the girls built FIREFly Health, a stove and chimney system that directs smoke away while cooking indoors. The device is made entirely of sustainable materials, including six cans and two bricks. It is said to kill all possible contaminants and follows World Health Organization standards for air quality.



What IS That?

LED Glowing Light Saber Star Wars Chop Sticks and Asian cuisine go together like, well, Tony Bennett and hip-hop. Still, among the 19,000-plus reviews on Amazon—yes, that number isn't a typo—73 percent were 5 stars. Hopeful inventors, never give up.

Get Busy!

Got a personal grooming concept/product you'd like to pitch? The International Beauty **Show**, the leading beauty trade show in the United States, is June 24-26 at the Las Vegas Convention Center. Categories include hair, skin and nail care; cosmetics; and men's grooming products.

WHAT DO YOU KNOW?

True or false: Trademarks must be registered to be protected.

The inventor of Nerf Football played in the NFL as a:

A) Quarterback

B) Running back

C) Linebacker

D) Kicker

Which was invented first—the plastic Hula Hoop, or the Frisbee?

Which 1700s inventor loved ice cream so much that he that he had special molds and tools imported from France to help his staff prepare it?

C) Anders Celsius

A) Thomas Jefferson B) Benjamin Franklin

D) Eli Whitney

True or false: Eddie Van Halen, who invented and patented a guitar playing aid called the "Van Halen Eruption Bridge," never learned to read sheet music.

1. False. Trademarks are protected under common law as soon as they are used in commerce. But registering a trademark with the USPTO provides important legal benefits such as the ability to file a lawsuit to protect the mark, and the ability to use the registration symbol. 2. D. Fred Cox invented it in the early 1970s. 3. Frisbee, 1948; Hula Hoop, 1958 4 A 5 True

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