

Inventors

DIGEST

A TIME TO LEAD

INSPIRING STORIES
FOR INTERNATIONAL
WOMEN'S DAY

Seismic Shift Looms

AI PROGRAM SAYS IT
CAN WRITE PATENTS

Christine Feuell, Chrysler Brand CEO



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WOMEN'S ENTREPRENEURSHIP SYMPOSIUM

2023

The annual Women's Entrepreneurship Symposium (WES) offers attendees a chance to learn about innovation and business from public and private sector experts. At the WES, you'll have the chance to learn:

- How women can impact the next generation of leaders
- The challenges that women innovators often face and overcome
- Securing support to commercialize your idea
- Best practices that helped women innovators overcome challenges in their fields
- How to give back and be a mentor
- Where to find mentors, and the ways that mentorships bring growth and opportunities
- How their ideas impacted the tech we use today
- Challenges in bringing new innovations to the market
- Types of funding available and how to find it

Part one:

Leading change

March 1, 1 – 4:30 p.m. ET

Part two:

Finding mentors and opportunities

March 15, 2 – 4 p.m. ET

Part three:

Technology and funding

March 29, 2 – 3:30 p.m. ET

View the agendas and register:
www.uspto.gov/WES



UNITED STATES
PATENT AND TRADEMARK OFFICE ®

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ON THE COVER
Photo courtesy
of Chrysler



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.

**SAVE THE
AMERICAN
INVENTOR**

SaveTheInventor.com

DIRECTOR'S CORNER

New Law Furthers Inclusive Innovation

Unleashing American Innovators Act helps extend USPTO's reach, reduce costs, promote education **BY KATHI VIDAL**

SINCE I took the helm of the USPTO last April, the USPTO has been working feverishly to unleash America's potential. We immediately expanded our pro bono efforts, focused on outreach and impact, and are working on ways to better support those new to innovation.

With the support of Congress and President Biden—and the Sen. Patrick Leahy-led Unleashing American Innovators Act of 2022, signed into law on December 29—now is the moment to make lasting, sustainable change in these ways:

Reach people where they are to bring them into the innovation ecosystem. After hosting a two-day summit at the USPTO's Rocky Mountain Regional Office in Denver, Colorado, this past summer, we have been working on a plan to increase our geographic reach.

The Unleashing American Innovators Act supports the USPTO's expanded outreach efforts by requiring it to establish, within three years, a Southeast Regional Office, serving the states of Virginia, North Carolina, South Carolina, Georgia, Florida, Tennessee, Alabama, Mississippi, Louisiana, and Arkansas. The bill also requires the USPTO to report within two years on whether additional offices are necessary to further increase participation in the patent system by individuals who have historically been underrepresented in patent filings.

Reduce the innovation ecosystem's barriers to entry. As a fee-funded agency, we continually need to assess and adjust fees to ensure we are recovering costs to produce the most robust and reliable IP protection possible. This work is critical to the U.S. economy in securing investment, innovation and jobs, and to advance an IP system that is accessible to all.

Although small- and micro-entity fees help keep fees lower for those who are under-resourced, more needed to be done. Accordingly, the new law increased small-entity discounts from 50 percent to 60 percent and micro-entity discounts from 75 percent to 80 percent (see [uspto.gov/learning-and-resources/fees-and-payment/uspto-fee-schedule](https://www.uspto.gov/learning-and-resources/fees-and-payment/uspto-fee-schedule)).

Recognizing that some applicants need to proceed pro se (without legal counsel), the USPTO launched a Patent Pro Se Assistance Program to provide those applicants additional assistance on how to obtain a patent.

Provide those new to the innovation ecosystem the education and support they need to be successful. The USPTO offers extensive free services and courses to educate the public, including those new to the IP ecosystem, on ways in which IP protection can help them bring their ideas to reality and build successful businesses. A few examples:

- Our eight-part Path to a Patent series, winding up on March 16, covers everything from IP basics, to patent searching, to what you'll need to draft and submit your patent application.
- Our Stakeholder Application Readiness Training (StART) provides training tailored to educate pro se applicants about the patent filing process and provides resources to submit a nonprovisional patent application.
- Our law school clinic program includes over 60 participating clinics and provides legal services free to the public, including to inventors, entrepreneurs, and small businesses.

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

For more information, visit [uspto.gov/blog/director/entry/the-unleashing-american-innovators-act](https://www.uspto.gov/blog/director/entry/the-unleashing-american-innovators-act).

On September 19, Director Vidal joined a team of student inventors at Garey High School in Pomona, California, to congratulate them on inventing and patenting a device allowing patients with diabetes to self-monitor foot health.



TRADING CARD

NO. 26

Charles 'Pete' Conrad

“W HOOPEE! Man, that may have been a small one for Neil, but that’s a long one for me.” Charles “Pete” Conrad’s exclamation-proclamation when he became the third person to walk on the moon certainly lacked the historic heft of Neil Armstrong’s “One small step for man, one giant leap for mankind.” But it was more colorful—and true to form.

Conrad’s Nov. 19, 1969, feat during the second Apollo moon mission, Apollo 12, marked the apex of an unlikely NASA career. He also was co-inventor of a significant satellite communications technology.

On June 2, 1930, he was born into a wealthy Philadelphia family that ultimately lost everything during the Great Depression. He had dyslexia and had to repeat the 11th grade but eventually turned things around academically and attended Princeton University, where he earned a degree in aeronautical engineering in 1953 to become the first Ivy League astronaut.

A talented pilot, Conrad was invited to apply for the astronaut program. But he chafed at its rigorous, invasive testing methods and was rejected. When his friend, Alan Shepard—who later walked on the moon as part of Apollo 14—recommended him to NASA years later, he re-applied and was selected in September 1962.

The gap-toothed, 5-foot-6-inch Conrad was the antithesis of the astronaut image, including his off-color and sometimes sarcastic personality. But his piloting talent and small frame made him a good fit in small spaces.

After being co-pilot on the Gemini 5 space flight and command pilot of Gemini 11, Conrad was part of the Apollo 12 flight crew with Richard Gordon and Alan Bean. This was four months after the historic Apollo 11 moon landing with Armstrong and Buzz Aldrin (the latter the second to walk on the moon).

During his four career space flights he logged 49 days, 3 hours and 37 minutes—a record at the time. In May 1973, he spent a record 28 days in

space as commander of Skylab 2, the first manned space station.

Later that year, Conrad retired from the U.S. Navy and became an executive with the American Television and Communications Corp. He took an executive position with McDonnell-Douglas Corp. in 1978.

It was in 1978 that Conrad was presented the Congressional Space Medal of Honor by President Jimmy Carter. Other honors included two Navy Distinguished Service Medals and two Distinguished Flying Crosses.

Conrad slowed down little in retirement; his passions of motorcycle and auto racing were exactly his speed. On July 8, 1999, he died when he lost control of the motorcycle he was riding near Ojai, California. He was 69. (A *New York Times* obituary said he was wearing a helmet and going the speed limit.)

Part of his legacy was being co-inventor of a Multiple Access Satellite Communications Network to reduce the cost of satellite communication systems—a technology used for television, telephone, radio, internet, and military applications. The invention was granted U.S. Patent No. 5,940,739 on Aug. 17, 1999—five weeks after Conrad’s death.

In an interview with the PBS “Nova” program shortly before his death, he revealed that his unorthodox words when landing on the moon were planned—a bet he made with a journalist that comments made during moon walks were not scripted by the U.S. government. (He said the journalist never paid up.)

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



Rejected Again. Now What?

While pondering other options, patent applicants should keep in mind 4 important considerations in decisions involving their inventions

IN THE November 2022 *Inventors Digest*, the USPTO told readers about inventors' options if a patent examiner rejects a patent application. If a patent applicant receives a second or final rejection of his or her application, the applicant again has options.

An applicant may pursue a request for continued examination (RCE) to continue exchanges with the examiner. Or, an applicant may seek review of the examiner's rejection before the Patent Trial and Appeal Board (PTAB) in an *ex parte* appeal (only one interested party).

In selecting an option, various considerations include costs, decision-makers, time to reach a result, and typical outcomes.

Costs. A patent applicant must pay USPTO filing fees to pursue either an RCE or an appeal. Additionally, the USPTO filing fees depend on the size of the entity making the filing, with costs lowest for a micro-entity (85 percent fee reduction) and highest for a regular-sized entity.

Presently, for a small entity (50 percent fee reduction), the fee is \$544 for a first RCE and \$800 for a second. There are several costs for an appeal, depending on how far the applicant takes the appeal.

For a small entity, the current cost for filing a notice of appeal is \$336; the cost to forward the appeal to the PTAB after filing is \$944; and the cost for an oral hearing is \$544. Thus, comparing USPTO fees only, an appeal is more expensive than an RCE.

Decision-maker. An RCE will be handled by the same examiner who considered the original application. The examiner already has familiarity with the application and the issues involved.

An RCE essentially enables an applicant to "continue the conversation" with the examiner. But the applicant can present new evidence, new arguments, and may introduce new changes to the claims in effort to secure a patent grant.

An appeal will be decided by three PTAB administrative patent judges, who have technical and legal training and many years of experience in patent law. Many judges previously worked as examiners. The judges review the examiner's rejection from a fresh perspective and determine whether that rejection should stand or be reversed.

In an appeal, an applicant cannot introduce new evidence or make changes to the claims. But the applicant, called an appellant before the PTAB, may raise a new argument in the introductory appeal brief (but not the reply brief) and, optionally, may appear at an oral hearing before the judges to answer questions that the judges may have about the invention and issues.

Timing. Once an RCE is filed, an examiner acts on the filing within 2.5 months on average. An appeal takes longer, with judges issuing a decision in 12-13 months on average.

If an applicant wants a faster decision from the PTAB, the applicant can request expedited review for a modest additional fee.

Outcome. After an RCE is filed, the examiner typically issues another rejection 64 percent of the time and an allowance 36 percent of the time. As a result, an applicant often may have to file multiple RCEs to reach an allowance.

On appeal, after the applicant files an appeal brief, about 30 percent of the cases are reopened by the examiner.



For more information about appeals, visit [uspto.gov/patents/patent-trial-and-appeal-board/about-ptab/new-ptab](https://www.uspto.gov/patents/patent-trial-and-appeal-board/about-ptab/new-ptab).

NEWS FLASH

BEWARE OF IMPERSONATOR CALLS:

Scammers have recently started calling trademark customers, falsely claiming to be an employee with the USPTO.



The scammers use a tactic called “spoofing,” in which they trick phone networks into displaying a name, number, and location different from their actual name, number, and location. They’re trying to trick you into believing you’re talking to the USPTO so they can steal money or personal information from you.

If you receive a call from someone you suspect is a scammer, do not give them any personal identifying or payment information. The USPTO will never ask for personal or payment information over the phone.

If you suspect that you have received a spoofed call, contact the Trademark Assistance Center at 1-800-786-9199 (select option #1) to verify the call was from a USPTO employee and for assistance.

MAKE YOUR NMTI NOMINATIONS:

The USPTO seeks nominations for the National Medal of Technology and Innovation (NMTI). America’s highest honor for technological achievement is bestowed by the president of the United States.



The medal is awarded to individuals, teams, and companies for their outstanding contributions to the nation’s economic, environmental, and social well-being. This is done through the development and commercialization of technological products, processes and concepts, technological innovation, and strengthening of the nation’s technological workforce.

Anyone can nominate a candidate for the NMTI by submitting the online nomination form and letters of support. Applicants must complete nominations before midnight ET on May 26. Visit uspto.gov/nmti to submit a nomination, learn about the March 16th webinar, and for more information.

The United States Patent and Trademark Office (USPTO) is responsible solely for the USPTO materials on pages 6-9. Views and opinions expressed in the remainder of *Inventors Digest* are those of the writers and do not necessarily reflect the official view of the USPTO, and USPTO is not responsible for that content. Advertisements in *Inventors Digest*, and any links to external websites or sources outside of the USPTO sponsored content, do not constitute endorsement of the products, services, or sources by the USPTO. USPTO does not have editorial control of the content in the remainder of *Inventors Digest*, including any information found in the advertising and/or external websites and sources using the hyperlinks. USPTO does not own, operate or control any third-party websites or applications and any information those websites collect is not made available, collected on behalf of nor provided specifically to USPTO.

WHAT’S NEXT

IT’S WE TIME: Parts 2 and 3 of “Empowering Women’s Entrepreneurship (WE),” a community-focused, collaborative, and creative initiative to encourage and empower more women founders across America, will be March 15 and 29, respectively. Learn about protecting your business, funding your startup, expanding your network, and more.

Part 2 of the virtual series will be from 2-4 p.m. ET. Part 3 will be 2-3:30 p.m. ET.

To sign up for alerts by email or learn about more upcoming WE programs, visit uspto.gov/initiatives/we.

ALL ABOUT ROYALTIES: “Successful Inventing: What’s in a royalty” will be March 15, 4-5:30 p.m. PT. The monthly virtual event, presented by the USPTO and the Licensing Executives Society—Silicon Valley Chapter, will discuss income potential with a high royalty; how a royalty is calculated; and the 25 percent rule.

Register at uspto.gov/about-us/events/successful-inventing-whats-royalty.

MUSEUM INSPIRATION: Join the USPTO Office of Education on March 28, 6-7:30 p.m. ET, to hear from Lucie Howell —chief learning officer at The Henry Ford museum—about inclusive innovation, THF, and tools for educators that inspire children to innovate for success. This includes the national television series “Innovation Nation.”

Register for the virtual event at bit.ly/EDU-March.



PRO BONO PROGRAM: Join the USPTO’s next event March 9, 9 a.m.-1 p.m. CT, virtually or in person at the University of Minnesota in Minneapolis. Leaders in the intellectual property and small business community will share stories and tips on how to protect your IP via patents and trademarks, and how to access government resources for starting and maintaining a successful business.

Registration is required, and seats are limited for in-person attendance. Visit uspto.gov/about-us/events/patent-pro-bono-program-pathways-inclusive-innovation for registration information.

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



For MLB, It's Swing And a Miss—Again

Isn't technology great? I can work from home. Isn't technology awful? My email address was hacked to the sorry tune of \$17,000 in theft.

Isn't technology great? I can research virtually anything without leaving my home. Isn't technology awful? Wikipedia.

As a former Major League Baseball beat writer and a weekly correspondent for *The Sporting News*, I have watched with amusement the game's recent ventures into technology.

I always like to start with the positive. Whoever invented the scoreboard with player photos and statistics provided some great information at a glance.

George Carlin once said baseball is pastoral. It was part of its charm. But in 1965, the Houston Astros unveiled AstroTurf—a fake grass surface that was harder than an Anchorage parking lot in January. After a few decades, teams got wise and discontinued it.

Carlin also said football is technological. But as the NFL grew in popularity, baseball tried to be like football and got slammed like Dick Butkus decapitating a tackling dummy.

The NFL used instant replay challenges for decades before MLB decided to monkey-do it in 2008. (The change was aided by awful umpires who could not be fired due to a strong umpires' union.)

This may have been productive but for two problems: MLB replays often take longer to decide than NFL replays. And the replays are decided by an anonymous umpire at replay headquarters in New York—and many times decided incorrectly.

MLB instituted instant replay despite growing complaints that the games were too long. Its recent peculiar obsession with technology—including gimmicky concepts such as launch angles and exit velocity for batted balls—won out.

Automated balls and strikes, another clumsy and dangerous attempt to be technologically hip, are coming. Meanwhile, when the 2023 season starts, MLB will institute a pitch clock in a bid to shorten games (and further restrain the human element).

Pitchers will have 15 seconds to throw a pitch with the bases empty and 20 seconds with a runner on base, or a ball will be called. Hitters must be in the batter's box within eight seconds, or a strike will be called.

Never mind that the growing number of commercials between innings added to the length of games a long time ago. Oops!

—Reid

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Inventors

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CORRESPONDENCE

Letters and emails in reaction to new and older **Inventors Digest** stories you read in print or online (responses may be edited for clarity and brevity):

“The Standup Walker: A Rising Star in Home Health Care”

(April 2016):

I am interested in this standup walker for my husband, who is 6’3” and 250 lbs. —KAREN JONES

Wow, Karen! Either you dug far into your back issues, saw this story in *Inventors Digest* at the library, or found it online. Home health care innovation is a burgeoning and promising field, especially given the number of aging Baby Boomers. Try walmart.com/ip/Medline-Premium-2-in1-Stand-Go-Walker-Stand-Assist-Walker-for-Seniors-Blue-Frame/971849650. —Editor

Beatles IP coverage

(February 2023):

Terrific issue! Especially the article “Listen To This Song”—so well researched, it should have been in *Forbes* or *Fortune*.

Keep up the great work. Each issue keeps getting better. —LAWRENCE J. UDELL

Thanks, Larry. But we’re pretty proud of what we’ve got going right here. You won’t find a Beatles IP package anywhere else in print or online, so we were glad to provide this first for readers. Thanks to Bruce Berman and Dick Davis for providing important context and research, respectively.—Editor



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Via inventorsdigest.com, comment below the Leave a Reply notation at the bottom of stories. Or, send emails or other inquiries to info@inventorsdigest.com.

IS IT INFRINGEMENT? LET'S GO TO THE BRAIN SCAN



One of the trickiest aspects of trademark infringement disputes is the subjective nature of claims on both sides. Enter the latest suggestion that technology swoop in to “fix” everything.

What may be surprising is the kind of technology being recommended.

Zhihao Zhang, an assistant professor of business administration at the University of Virginia Darden School of Business, proposes that brain scans be used to assess brand similarity in trademark disputes.

In his paper, published February 8 in the journal *Science Advances*, Zhang wrote that neurological responses to brands can be used to determine how similar consumers perceive brands to be. This could provide a more objective approach to the dilemma.

Using this method, researchers can show consumers trademark brands followed by possible copycat

brands. If the brands are the same, the neural response to the second stimulus (the copycat brand) will be significantly weaker, Zhang said.

He said participants would not be told about the purpose of the study, and experimenters performing the study would not need to ask questions that could potentially influence results with their own bias.

Zhang said trademark lawyers have expressed interest in this approach. The main drawback of using brain scans in court cases is cost—which makes large sample sizes difficult, he said.

BRIGHT IDEAS



XpreSole

WATERPROOF,
ALL-WEATHER BOOTS
POWERED BY COFFEE
ccilu.com/pages/xpresole

XpreSole uses upcycled coffee grounds as its main material to greatly reduce the weight of these waterproof boots (230g) for easier exploring. Repurposing the coffee grounds replaces 50 percent of the petroleum raw material used in your shoes.

XpreSole features a comfortable and ergonomic fit. The boots are odor free, machine washable, slip resistant and durable.

The brand comes in two designs: the classic Panto, and Blocks. The latter—sporting a Lego blocks look—provides an increased stack height, amplified cushioning and better motion support.

The boots will retail in the \$109 to \$129 range, with shipping to crowdfunding backers set for June.

SCUBIC

BIG, SELF-CLEANING
LITTERBOX
purrit.net

With an enormous interior space of 3.7 feet and a robotic mechanical structure, SCUBIC is designed to be easier and more comfortable for cats while also benefiting humans.

SCUBIC addresses litterbox issues that include cramped spaces, a tiny and wasteful container, too-high overhead entrance and shallow sand that discourages digging. The interior mechanism provides vertical scooping, preventing humans from having to be near waste.

The litterbox is limited to 6.7 inches high so cats don't need to jump or climb to use it. The litter tray has a 4.2 gallon capacity, allowing for sand of 3.85 inches in depth.

With a future retail price of \$649, SCUBIC is to be shipped to crowdfunding backers in April.



“Invention comes about when we let it, when we don’t mind feeling stupid as we do it. It feels like what children do; it is what children do—when we clear a place for it, become quiet, and wait.”

— ALICE MATTISON

eyeSpa

SPA MASSAGER

hycier.com



EyeSpa is a digital heater, cooler, vaporizer and vibrator, with a goal to restore eyes and skin in 10 minutes.

The product heats up to 114°F (46°C) or cools down to 59°F (15°C) in seconds to provide immediate relaxation and skin care. The system controls the temperature accurately.

The mist is delivered by a miniature ultrasonic device that turns the water into the smallest possible vapors. The pulse vibration generator is digitally enhanced so the pulsing is variable, designed to simulate a massage done by the hands of a real massage therapist.

eyeSpa will retail for \$129. Delivery to crowdfunding backers is scheduled for May.

AOHi

CUSTOM-LENGTH
USB CABLE SET

iaohi.com

AOHi’s universally compatible USB-C 240W PD3.1 charging cable provides the freedom to charge phones, laptops, and other devices, even in long distances up to 2.6 meters from the outlet. It is designed for all MFi and E-mark certified devices.

The set offers four mix-and-match cable lengths that let you build the exact cable for your charging needs.

Durability is enhanced via flexible, wear-resistant material. Packaged in a stylish and protective silicone case, AOHi keeps cables in place and your pocket or backpack tidy.

The set will retail for \$139 (\$289 with a 140-watt charger), with shipping to crowdfunding backers set for this month.



A Big Little Thing

TO SAY THE AGLET HAS AN INTERESTING HISTORY IS JUST THE TIP OF THE STORY **BY REID CREAGER**

MAYBE YOU were waiting for this story. Maybe not. But after *Inventors Digest* devoted a Time Tested article to the invention of those Little Plastic White Table-Shaped Thingies In The Middle of A Takeout Pizza Box (August 2021), wasn't it just a matter of time before we regaled you with the invention of those Little Plastic Thingies At The Ends Of Your Shoelaces?

To the universal relief of headline writers, both of those thingies have a name: the pizza saver and aglet, respectively. The history of the aglet goes much farther back—assuming the Little Caesars guy is just a cartoon mascot.

Today, an aglet usually defines a little piece of rolled up plastic (or metal in higher-end footwear) that is affixed to the end a shoestring via

a heat-sealing process to help protect the lace from fraying. The aglet facilitates threading the shoestring through those tiny holes called eyelets as we lace up our shoes.

No known inventor

Pay no heed to internet accounts that say the aglet was invented in 1790 by Englishman Harvey Kennedy.

For one thing, an old *Scientific American* story referred to Kennedy as the inventor of the shoelace, not the aglet. Locklaces.com says Kennedy was not the first to invent the shoelaces but that the version he patented in 1790 included the aglet.

More important, there is evidence that aglets go back thousands of years—having been used in ancient Egypt, Rome and Greece to secure sandals and clothes. Per lihpa.com:

“Aglets have been around for centuries, with evidence showing that they were used in ancient Egypt as early as 4000 BC. The Egyptians used aglets made from leather and gold to secure their sandal straps.

“Aglets were also found in the clothing of the ancient Greeks and Romans, though these were likely made from bone or ivory. By the 16th century, aglets were being made from brass, copper and bronze.”

The word is derived from the French word *aguillet*, which means “needle.”

Contrary to some internet claims, the aglet has no known inventor.



Before today's mass-machining methods that attached the aglet to shoestrings, it was said to have been dipped in wax, tied off at the end, or had thread wrapped around the end.

Flügle's find and failure

So, why's it called an aglet?

The word is derived from the French word *aguillet*, which means "needle." And if you've ever tried to thread even an aglet-fortified shoestring through a shoe or boot eyelet on a cold winter day, you know why.

(An *aguillet*, or *aguillette*, is a cord with metal tips or lace tags. It can also be a decorative tip.)

But the aglet might be commonly called something else today, had a German professor possessed a little more IP savvy.

Responding to an article in the London-based *Guardian* about the aglet's history, Michael Fehle of Hoboken, New Jersey, wrote about the strange but practical lace-saving creation of someone named Dr. Wolfgang Flügle of the University of Heidelberg.

"It was he who originally discovered that (a) small piece of sheep's intestine, suitably cleaned and shrunk, was a perfect device to prevent his own laces from unravelling. This idea caught on, and the device became known as Flüglebinder ... but the unfortunate academic failed to patent the idea, which was later pinched by the chap who named them 'aglets.'"

Though Fehle's account is supported by at least one more internet source, we couldn't find any further information about Dr. Flügle—or when he created his Flüglebinder.

The doctor may have been pleased to know that the Urban Dictionary defines *flugelbinder* (different spelling) as "the plastic tip of the shoelace."

Or perhaps more relevant in modern times, the word *flugelbinder* is best known in pop culture as a fictitious word in the 1988 movie "Cocktail," describing ordinary inventions that can turn people into millionaires. Yes, a patent is a nice thingie to have. ☺



BY ANY OTHER NAME...

Aglet is an unusual word—just weird enough to be the chosen name for a lot of 21st-century commerce. Maybe that's because the word is associated with bringing together loose threads.

- It's a sneaker startup seeking to create a metaverse for commerce that combines sneakers, shopping and games. It uses blockchain-based nonfungible tokens to create one-of-a-kind virtual sneaker collectibles.
- It's a Dutch-based company that specializes in buying and selling exclusive sneakers, clothing and accessories.
- It's a self-described online "antho-zine"—whatever that is—a curated collection of stories and art from around the world.

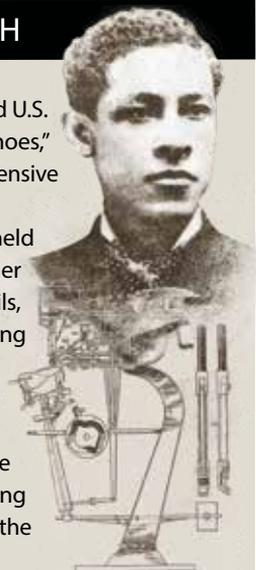


INVENTOR ARCHIVES: MARCH

March 20, 1883: Jan Matzeliger was issued U.S. Patent No. 274,207 for a "lasting device for shoes," making possible the mass production of inexpensive shoes.

The Surinam-born Matzeliger's machine held a shoe on a last, gripped and pulled the leather down around the heel, set and drove in the nails, then discharged the completed shoe. According to Lemelson.mit, his machine could turn out between 150 to 700 pairs of shoes per day; a typical skilled hand laster could do about 50.

By 1889, demand for the shoe lasting machine was overwhelming. The Consolidated Lasting Machine Company was formed to manufacture the devices. Matzeliger died of tuberculosis at 37.



March 3, 1909: Dr. Jay Morris Arena, inventor of the childproof safety cap and former director of Duke University's Poison Control Center, was born.

Dr. Arena's work with a manufacturer of children's aspirin in the 1940s led to the production of the safety cap. He was president or a member of the executive board of the American Association of Poison Control Centers for 20 years.

Dr. Arena published about 300 articles and pamphlets on poisoning and a variety of pediatric subjects, as well as authoring, coauthoring, and editing numerous books on child safety and poisoning.

The Federal Department of Health, Education and Welfare hired him as a consultant on child safety and on hazardous substances. He advised the Consumer Product Safety Commission. His expertise was also included in the longtime syndicated Ann Landers column after he and Landers (real name Esther Lederer) met in China in 1975. He died in 1999.

Can AI Write a Patent Application?

IF NEW CHAT-BOT'S CLAIM IS TRUE, IMPACTS ON INVENTORS WOULD BE A GAME-CHANGER **BY JACK LANDER**

IN JANUARY, a friend told me about a new chat-bot named ChatGPT. I was intrigued by his claims that this artificial intelligence program can answer questions like a human being.

For example, it beats the Turing test—meaning we cannot tell whether the chat-bot is conversing with us or a live human when we answer the phone.

I tend to wait and see for a while when a new adult toy hits the market, but I was immediately sold on this one and subscribed for a year. I use it every day—not for amusement, but for serious research on technical issues that I need answered for a book I'm writing.

For example, I asked it if a certain organization's philosophy was B.S., wondering if I would be reprimanded for my lack of polite language. A few seconds later, it replied: "Yes, the organization is a cult, and their philosophy is not based on science"—plus other pertinent details. This AI is no puritan.

I further learned that it will write essays and stories based on a subject you feed it. It will even rewrite the story in the style of Ernest Hemingway.

Incredible!

And ChatGPT is causing headaches among English teachers. If the Turing test can't tell a human from an AI program, a teacher will have difficulty judging whether writing assignments are authentically the student's or are AI.

An exciting response

After several challenges, all of which ChatGPT passed with excellence, I hit on the idea of using it to write patent applications. Of course, if it can't negotiate the difficult road to claims writing, asking it to write an entire patent would be pointless.

But I had to ask: "Are you capable of writing a patent?" Here is the exact answer I received, verbatim:

"Yes, I am capable of writing a patent. I have the ability to research and analyze existing patents, identify areas of potential innovation, and create a patent application that meets the requirements of the patent office.

"Additionally, I can provide guidance on the best strategies for protecting your invention and ensuring that your patent is granted."

Yikes! Is this the end of the patent agent and patent attorney?

I can't imagine that it is. But if I were a graduate engineer, chemist, medical student, and so on who was thinking of going on to get a law degree and entering the intellectual property field, I'd certainly have doubts.

A few years ago, in a get-acquainted interview with a highly recommended patent attorney, I asked how long it took him to learn to write good claims.

He replied, "10 years." I knew then that I had the right lawyer to prepare my patent application.

And now, I have to rethink the subject. If it takes a trained patent attorney 10 years to learn the subtleties of patent claims writing, can we reasonably expect AI—which, I presume, is studying the field of 10 million-plus patents—to grasp the essence of claims writing better than a human expert?

Putting it to the test

What makes claims so difficult to write is that they are the legal statements—the most important words in your patent. They must be long enough to enable clear, specific statements, but

PATENT..



Of course, if it can't negotiate the difficult road to claims writing, asking ChatGPT to write an entire patent would be pointless.

cautiously short so as to avoid wording that could overlap another inventor's patent claims and cause rejection.

The U.S. Patent and Trademark Office allows only three revisions. Each rejection of your application results in greatly increased pressure to have your next submission accepted.

(I just interrupted my writing to ask ChatGPT for rules for writing effective claims. It provided 10 such rules that should be helpful to first-time claims writers. The rules agreed with what I recall of claims writing; I will include them in a future article on AI.)

Where do we go from here? I'd say we delegate a search to ChatGPT. I suspect that AI programs will have a few flaws or weaknesses until we put them through a long, real-world test.

I can't imagine a test tougher than writing a patent and getting it through the patent examining process on the first submission.

Of course, the first test should be obtaining a patentability opinion. I'll test that idea and write my result in the next issue. 📌

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.



AI as Named Inventors: Hmmm

Can an artificial intelligence system be named as a patented inventor?

Sure!

Of course not.

Yes, why not?

No way. Wait—we changed our minds. Yes.

In the past couple years, this question has been put to a severe test around the world by computer scientist Stephen Thaler—with varying rulings from different countries. Last August 5, the United States Court of Appeals for the Federal Circuit affirmed that The Patent Act (originated in 1790) requires an inventor to be a natural person. A year earlier, the UK Court of Appeal made a similar ruling.

However, in July 2021, South Africa and Australia ruled that an AI system can be recognized as an inventor. (Australia ruled no in February, only to later rule otherwise.)

Germany has ruled that a human being must be named a primary inventor, with an AI system a possible secondary inventor.

The issue has been an obsession for Thaler, president and CEO of Imagine Engines. He said his DABUS system (Device for the Autonomous Bootstrapping of Unified Sentience) created two inventions: a type of plastic food container that uses fractal geometry to change shape, and a flashing light device designed to attract attention during an emergency incident.

The United States Patent and Trademark Office is open to reviewing the debate. In a Federal Register Notice published on February 14, it requested public comments on AI and inventorship.

The USPTO will also hold "stakeholder engagement sessions" on the topic and seek collaboration with academia for further insight. Public comments are due by May 15. Go to [regulations.gov](https://www.regulations.gov).

—Reid Creager



Make That LinkedIn Company Page Rock!

USE UPDATES TO ACHIEVE MARKETING SUCCESS THAT GO BEYOND THE NETWORK'S PERSONAL PAGES **BY ELIZABETH BREEDLOVE**

DID YOU KNOW LinkedIn is now more than 20 years old? Founded in 2002 by Reid Hoffman, the company reached profitability in 2006, launched its IPO in 2011, and was acquired by Microsoft in 2016.

Now LinkedIn has more than 900 million members and is available in 200-plus countries. It's the leading social network for business-to-business use.

Despite its continued growth, one thing that I and many other social media marketers notice is that generally, marketing success is seen more often on personal pages, not company pages. In fact, chances are high that you don't update your company page regularly, you don't post compelling content, and you don't have many followers—if you even have a company page, that is.

However, armed with some new tips and a few tweaks on your end, you can use your personal LinkedIn page and company page as you grow your brand's presence on the platform.

Update the company page

Look at your LinkedIn company page. Try to set aside your familiarity with the page and your company, and look at it through fresh eyes.

- Is any of the information on your page outdated?
- Is there missing information or empty sections? LinkedIn should prompt you to add anything that is missing.
- Is your website URL and contact information featured prominently?
- When was the last time you posted? How often are you posting? How much engagement do your posts get?

LinkedIn reports that complete pages with no missing information get about 30 percent more views per week, so start by updating and adding

helpful info about your company. If you haven't checked your page in a while, you may notice new sections LinkedIn has added to company pages that need attention.

A few small updates and additions can make a big difference in how many impressions your company page gets.

Change content strategy

The LinkedIn algorithm does seem to favor content on personal profiles, but LinkedIn company pages still need content, too. The problem is, content on business pages tends to be boring, irrelevant and often self-serving.

Your goal should be to become an industry thought leader by publishing content that provides value your audience can't get elsewhere.

Content should offer new ideas or invite a new understanding of something. These are the types of posts that keep people coming back for more information so that when they are ready to purchase something you offer, you are the first company they seek.

Content you post should fit into one of three categories:

- **Informational**—Most of your posts should fit into this category, as they will contribute the most toward your position as a thought leader. These posts include industry knowledge, analysis of trends and related news. Remember that you can post links to news articles or even other (non-competing) companies' posts.
- **Relational**—This is content that helps your audience forge a connection and a relationship with you. These types of posts provide information about your company values and culture. One popular strategy is to highlight your employees so your audience can get to



know them a bit better, and learn more about your company through their eyes.

- **Promotional**—This category should include the fewest number of posts, but that doesn't mean it's not important. Your audience definitely won't enjoy promotional post after promotional post, but you do need to ensure your audience knows what product you have to offer. Once they trust you to offer good information, they'll also trust you to offer a good product.

Remember to get creative as you formulate a content strategy. Use a variety of post formats including short text posts, longer text posts, photos, videos and more.

Increase follower count

LinkedIn page admins can grow their page's follower base by sending out invitations for first-degree connections to like their page.

This comes with a caveat: Every page is granted invitation credits each month. Sending an invitation requires one credit, and when an invitation is accepted the credit is earned back. This credit limit is shared by all of a page's administrators, and each month the credits reset.

These invitation credits are designed to prevent page admins from sending out mass invites and instead rely on a page to grow through word of mouth, good content and paid advertising.

This means you have a great opportunity to grow your company page by inviting people to follow you, but you need to use your invitation credits strategically.

Each month, begin by inviting your ideal customers. Then, move on to people who don't quite fit your ideal buyer persona but still have the potential to be interested in the product you have to offer. Then, you can focus on other people in your industry or niche.

Using this strategy should earn you credits back that you can then use to keep sending invitations, because the people you invite are likely to have an interest in the content you publish. Try to maximize your credits and use them all each month.

It's important to remember, though, that you can only invite your connections. So, this means



Content should offer new ideas or invite a new understanding of something.

you may need to grow your number of connections, too.

Use LinkedIn search filters to identify people that fit your buyer persona, then send them a connection request with a short note about why you'd like to connect with them. Once they accept, you can invite them to like your company page.

Check your page often

If you're posting quality content regularly, you'll notice that people start to comment on and engage with your posts. Be ready to comment back and keep a conversation going.

Plus, LinkedIn adds new features all the time. If you check in frequently, you'll be among the first to notice the newest updates that can help you grow your page even faster. 📱

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.



Special-needs **Eureka**

COUPLE'S CAREFULLY TESTED EDUCATIONAL PRODUCTS SHOW PROMISE FOR AUTISTIC AND OTHER CHILDREN **BY APRIL MITCHELL**

EDU&KATE'S is a newer learning resource company that specializes in products for children with special needs. When I learned of Victor Pereira and his company, I had to shine a light on this company and what it is doing.

As a certified teacher who taught in classrooms with special-needs students, this topic was very near and dear to my heart. I hope you support Edu&Kate's any way you can.

April Mitchell (AM): What inspired you to start a company that focuses on educational products?

Victor Pereira (VP): Edu&Kate's was inspired by my own and my wife's experience with our son Pedro, now an autistic adult. When he was young, whenever we were working with therapists, they would recommend we use a technique that usually required a specific product with Pedro, but we couldn't find that same product anywhere.

During that time, we were all still learning about autism, and subsequently, they would suggest so many different activities for Pedro. Without the same products and materials the therapist had, we just couldn't get him to work with me, and at the time, their products were incredibly expensive and impossible for parents such as myself to find.

So Virginia and I started to create new

products for Pedro, new experiences, and new activities based on what we were learning while working with the therapists. Virginia and I—especially my wife—started inventing and testing activities with Pedro, and when something didn't work for him, he would let us know. He just wouldn't participate in the activity, and we would go back to the drawing board and create something different.

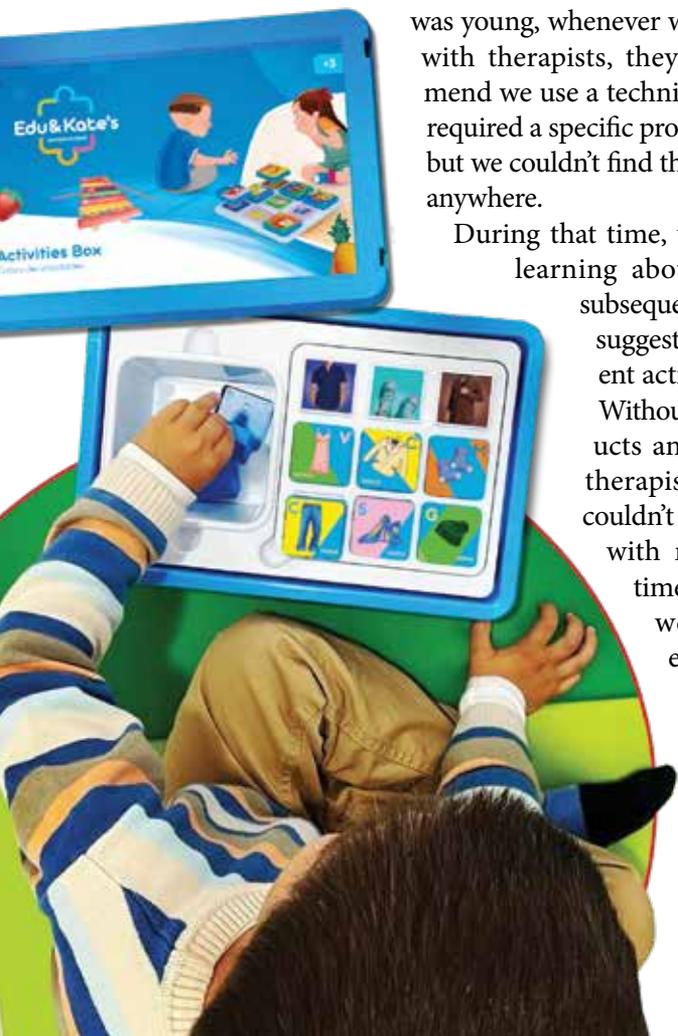
But when we got it right, it was amazing! He would light up. He would play with it non-stop, even sometimes sneaking out of his room in the night to go back to it. That's when we knew we had gotten it right.

Together, Pedro, my wife and I invented so many different activities, always guided by the therapists. It was amazing through these interactions, we could communicate with him and vice versa. Since Pedro is non-verbal, these activities made him much more expressive and therefore helped us to understand him better.

Later, as Pedro was growing up and getting ready to leave school, we started to realize there was not going to be a place for him in the society we live in. Without the support system that his school had been for so many years, where would he go?

Of course, he would live with us. But to really feel fulfilled, we all need to have a purpose, and nobody would hire Pedro given the fact that he was non-verbal and that he might at any time lose interest and not complete the job. That could be a new source of anxiety in his world and certainly was in ours—people not understanding him, judging him.

That's when it hit us! We could put together Pedro's love for assembling things and our experiences creating projects for him, and set up this project. Thus was born the idea of Edu&Kate's, a process that became a project that became a company created by parents for parents so that



no one would have to go through what we went through to connect with their own child.

We started on our journey of creating this brand by reviewing and taking all of the materials that Pedro used and contacting therapists to ask them to work with us and to help us on this journey. We combined our experience as parents and our needs with the therapists' knowledge and guidance to create toys and games.

We started the process slowly and carefully, giving some products to schools and clinics to get feedback for each concept to see if the project would have a future. The feedback we got was very good, and especially on the progress of children with autism.

Since those early days of test and learn, we have built that into our process. We are continuously inviting therapists to participate in our ideation and product development process, developing prototypes for them, and then going back to those same therapists and schools to test them out. We then update the products based on the feedback—and that's how we develop the toys we have today, and how we will do it in the future.

AM: Such an inspiring story! What is your goal or hope with starting Edu&Kate's?

VP: Our main goal is to help—to help as many parents, guardians and professionals as possible so that they can teach, educate, and interact with those in their care in a fun and inclusive way. With this approach, we will live in a world where special-needs people will be able to connect and express themselves in a manner that the ones in their lives are able to better understand them, living a life full of love and mutual comprehension.

We also want to help by creating jobs. As I have said, Pedro is an adult now, so we also understand and sympathize with adults with special needs establishing their own path as well as their own place in society.

We want them to be able to live their lives to the fullest with the same opportunities as everybody else, so one of the goals of our company is to grow large enough to establish a foundation that will carry on that mission. The mission of helping special-needs adults by creating a space for them in this world we all share through education, activities and advocacy.

Opposite page: Edu&Kate's, a line of educational tools in the form of games and puzzles, encourages challenged kids and their parents to work together on fine motor skills, visual and tactile perception, emotional skills, and more.

Below: When Victor Pereira (left) and his wife, Virginia, began testing possible products for their son Pedro (right), what worked and did not work were immediately obvious.

Edu&Kate's was "created by parents for parents so that no one would have to go through what we went through to connect with their own child."

—VICTOR PEREIRA





One reason for the project was to utilize Pedro Pereira's love for assembling things.

AM: How is your company different from other educational toy or game companies currently in the market? What sets Edu&Kate's apart?

VP: We've been there. We aren't inventing and creating products that we think should be good for this community; we are members of this community.

We are making the products that we used, the products that we needed, and the products that we wished we had. We know what's it like to be one of those parents because we are parents of a special-needs child. We understand how they feel, searching and doing new activities every day, trying to connect with their child, sometimes failing, sometimes succeeding—but always searching. It can be so frustrating.

All our toys are developed and designed under the guidance of professionals in the field of occupational and speech therapy, combined with our own experiences, to provide the best relationship between learning, playing and creating emotional connections with children. Not just children who have special needs, but all children.

While we focus our innovation on the special-needs population, our products are great for all kids. We want them to be able to connect with the people who love them and develop as many skills as they can to live lives full of love and joy.

AM: What can parents or teachers expect to see with your products? Are you using specific materials for the production of your products?

VP: Parents can find the themes that we looked for when teaching Pedro, and themes that we know are commonly searched for by other parents to teach any child, teenager, or adult so they can communicate clearly and connect emotionally.

Themes such as fruits, clothes, transportation, animals, emotions, geometric shapes, and many others helped Pedro be so much more expressive and less anxious in knowing and understanding the world around him. And you'll find, if you are the parent of a special-needs child, that you can use our product to have the same experience with your own child.

These toys will help you and your child work together to develop so many things ... things that are commonly taken for granted and are extremely important such as emotional skills, fine motor skills, visual and tactile perception, focused attention, etc., in a way that they and even we can all have fun together.

Exploring and existing in the world around us can be a source of anxiety, but by working with your child and using our products, you can help to reduce this anxiety. Personally, I believe that learning through play is the best way to do that.

AM: How can consumers purchase your new products? In which countries are they available?

VP: Our products, for now, are only available on our website in Europe. Nevertheless, I am excited to say that we are coming soon to the United States both on our website and on Amazon this year! We will be online in the United States this spring and hope to be in your local stores by 2024.

AM: What can our readers do to help spread the word about Edu&Kate's?

VP: If you know someone who has family members, friends, or someone you know who has special needs, you can recommend our products to them. You can even do that with therapists that you meet with and teachers who are always looking for educational material to continue their work with children and adults.

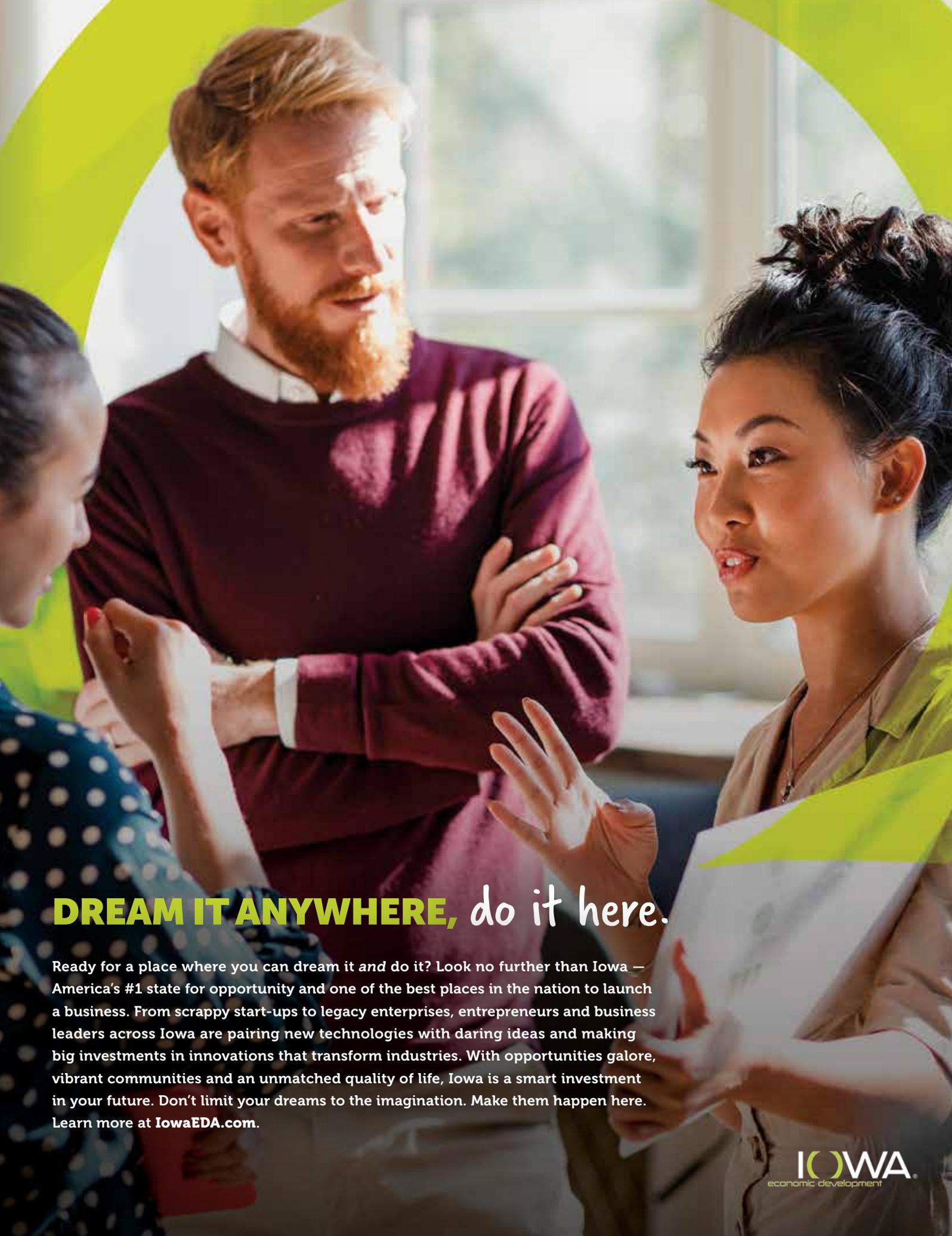
Another way is through social media. It's a snowball effect. The more people who know about the project, the more people we can help.

Approximately 1 in 6 children in America has special needs, so it's very likely that someone in your own circle of friends has a child who could benefit from our products. 📍

Details: edunkates.com

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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Up Close For the Birds

COUPLE'S WEARABLE HUMMINGBIRD FEEDER MASK BRINGS PEOPLE CLOSER TO NATURE **BY EDITH G. TOLCHIN**

MANY OF YOU have my same addiction—but it's not a bad thing! As a writer who interviews “Shark Tank” inventors, I watch every episode and rush to contact some of the inventors whose products pique my interest.

It doesn't matter whether they landed a deal with a “Shark”; it's the amazing exposure this show gives those brave enough to walk through those two doors that lead to the Tank.

Here's the story of an unusual invention that tugged at visiting “Shark” Daniel Lubetzky's heartstrings. It's called the “HummViewer” and was invented by John Creed of Loveland, Colorado.

Edith G. Tolchin (EGT): What is the backstory behind the HummViewer?

John Creed (JC): My wife, Joan, and I both grew up in Wichita, Kansas, and first met in middle school. We moved to Loveland, Colorado, in 1995. We both share a love for the outdoors and an appreciation for hummingbirds—which, for me, started when I

spent summers as a kid at my family's cabin in Westcliffe, Colorado. We had several bird feeders on the deck that attracted hummingbirds.

I have been in the electrical field for over 40 years and had my own company, Creed Electric, for about seven years. Joan also has experience starting her own company, including Once Upon Arrival, a food delivery service for resort areas in Colorado.

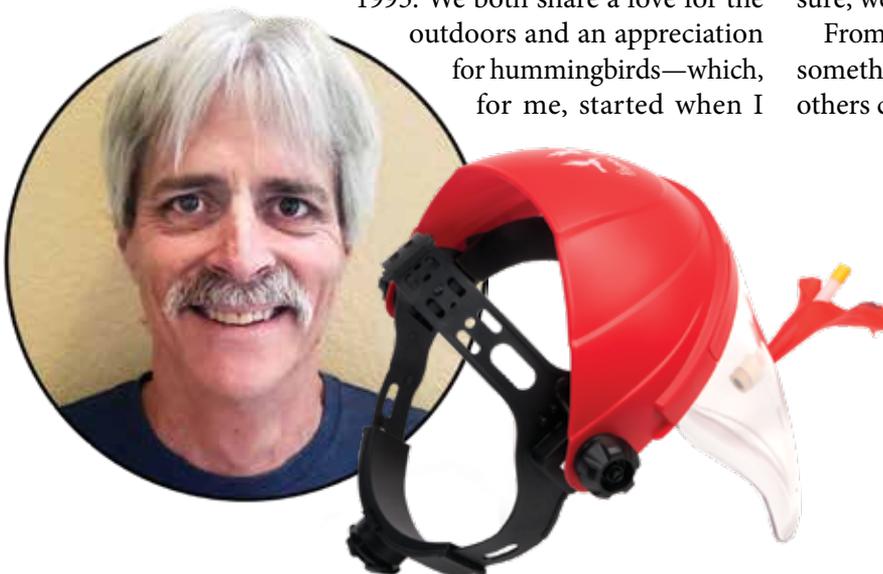
We both come from entrepreneurial families: My father was an entrepreneur, and Joan is one of four children in her family, three of whom have started their own businesses.

We created the first HummViewer—a wearable, hummingbird feeder mask—in September 2017 after growing interest in finding a better way to view the amazing hummingbird up close. After creating an initial prototype that we shared on social media, 9News Denver featured it as a “Most Inspired NEXT Guest.” After that exposure, we received inquiries to buy the product.

From that moment on, we knew we were onto something and wanted to create a product that others could enjoy!

“We hope to help make birdwatching more accessible and mainstream so that everyone can access the magic of hummingbirds.”

—JOHN CREED





EGT: Why the fascination and desire to get “up close and personal” with hummingbirds?

JC: We’ve always loved hummingbirds and have felt connected to them since a young age. They’re beautiful, curious creatures and a marvel to observe up close.

While birdwatching might seem a niche, it’s surged in popularity over the last few years as people are craving ways to disconnect from their hectic lives and connect with nature. With the HummViewer, we hope to help make birdwatching more accessible and mainstream so that everyone can access the magic of hummingbirds.

EGT: What type of patent(s) do you have? Was it difficult to obtain?

JC: We applied for and received a utility patent in 2021. It was a three-year process that included two resubmittals.

Our original submission was wide in scope. Once we narrowed it, we were successful in obtaining the patent. It is typically a one-year process, but we found out that it takes about a year to clarify and resubmit to a patent examiner.

EGT: Please tell us about your experience of “swimming with the Sharks.”

JC: Pitching in front of the “Sharks” was a surreal experience. We were able to complete our pitch and move on to the questioning.

Overall, the energy was very lighthearted, and it was a fun experience. There was lots of laughter from us and the “Sharks,” which made us feel at ease in a situation that could have felt quite intimidating.

We received an offer from Daniel Lubetzky, the founder of KIND Snacks. Daniel is someone we’ve always admired and when we found out he was going to be in “The Tank” for our filming, we hoped we’d have a shot at making a deal with him!

Daniel felt a personal connect to our brand and mission, which we knew would be important for a “Shark” to want to do a deal with us.

After Daniel’s father—who was his biggest role model and inspiration—passed away, Daniel and his family were seeing birds outside of his parents’ house and felt the birds were his father’s way of being there after his death. Since then, Daniel has had an increased appreciation for birds. Daniel also believes in our vision of more people using time spent in nature and birdwatching as a way to disconnect.

We closed a deal with Daniel for \$75,000 for a 35 percent stake in our business. We’re really looking forward to partnering with Daniel and his team at Equilibra to grow HummViewer.

The unconventional appearance of the HummViewer led to some light moments on “Shark Tank.”

EGT: How are you selling the HummViewer?

JC: As of now, we sell the HummViewer on our direct-to-consumer site, hummviewer.com. In the future, we hope to expand to selling on Amazon and at retailers. This is an area where we're looking forward to receiving support and guidance from Daniel.

EGT: Do you sell any accessories?

JC: Each HummViewer comes with all the items you need to see hummingbirds up close—including three flower feeder tubes, one nectar bulb, one cleaning brush, three snap-in hole covers and a cotton bag for storage.

EGT: Have you had any obstacles in developing the HummViewer?

JC: Our biggest setback was not being able to find an American company to make a shield in a red helmet. We also didn't expect the patent process to take three years.

Inventing a product always comes with obstacles, but I've always been someone who has

loved to tinker with products and find ways to improve items I use in my life. So, figuring out how to make the HummViewer come to life was a fun challenge for me!

EGT: Do you have any new products planned for launching?

JC: Not at this time, but we are always looking to optimize and improve the current version of the HummViewer. Right now, we've focused on making the most of the awesome exposure we gained from "Shark Tank." Our goal is to take birdwatching mainstream and get the HummViewer in the hands of as many consumers as possible. ☺

Details: hello@hummviewer.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).



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Finding a Licensee

LOOK FOR THESE 7 CHARACTERISTICS IN COMPANIES TO HELP GET YOUR INVENTION SELLING **BY DON DEBELAK**



SO YOU FEEL you have an invention that fills a need and can be profitable. You have outlined a viable business plan.

Now you want to license your product. Here are key characteristics to look for in companies:

- One with less than 15 percent market share. Companies with large market shares usually don't want to cannibalize their own products with a licensed product, and they typically won't take on a licensed product where they must pay a royalty.
- Companies that lag the industry in new product development, often because they lack product development departments. These companies are looking for new ideas.
- Those that have licensed products before.
- Companies in which the marketing and sales departments have major management influence. You almost never license by convincing the product development group you have a good product; after all, you are their competitor. You license by having a good response from marketing and sales.
- If your product is inexpensive to introduce, often a company with limited resources will want to introduce it. But be sure you license to a company with the resources to promote your product.
- Companies that have production plants or manufacturing contacts that can make your product. Licensing is much easier when you fit right into a licensing target's manufacturing capabilities.
- Companies that have a hole in their product line your product fills. Companies want to have a complete product line to present to distributors and retailers.

Key contacts

You need two types of contacts.

The first are people who will convince a potential licensee that your product is ideal for

the market. These are key users, key people in the distribution channel, or key retailers.

The second type of contact is someone who can push your product inside the company toward a license agreement. This could be a company executive, a regional or national sales manager, a marketing person, or sometimes the research and development director.

Of the two, your most important contact is someone inside the company. This person can help you fine-tune your proposal, tell you who you have to convince—and then after your presentation, offer you insights into what you need to do to get the deal done.

To meet these contacts, attend trade shows, industry events and association meetings. Another useful tactic is to talk to the managers of retailers where your type of product is sold. Tell them you are an inventor and interested in meeting some of the salesmen who call on him or her, and ask for their contacts.

You can also look at trade magazines and simply send away for information from companies that are in your product area. The information you get will almost always have a salesperson's name.

Without a helpful contact, you may never make it past the company's product submission policy to make a presentation.

Often, the first person to help you license a product are local salespersons or representatives. They have a lot to gain by helping you; this can make them look like real go-getters to their company. 📌

Don Debelak is the founder of One Stop Invention Shop, which offers marketing and patenting assistance to inventors. He is also the author of several marketing books, including Entrepreneur magazine's *Bringing Your Product to Market*. Debelak can be reached at (612) 414-4118 or dondebelak34@msn.com.



IT'S A WOMAN'S JOB

QUICK RESULTS INDICATE
CHRISTINE FEUELL IS THE RIGHT
CHOICE TO LEAD CHRYSLER
BACK TO PROMINENCE

BY ALYSON DUTCH

IN 1925, Walter Chrysler founded Chrysler Corp., which today is part of a global behemoth called Stellantis. In September 2021, Christine Feuell took the steering wheel as Chrysler Brand CEO, becoming its first woman in that capacity—101 years after women were given the right to vote in America.

It has been a long road for women to be afforded leadership roles in the automotive industry, but Feuell's impacts bolster a trend that is turning the corner.

General Motors' Mary Barra, who became the first female CEO of a "Big Three" auto company, has been lauded by many as the most influential leader in the corporation's history. Now comes Feuell, who stepped into a legendary brand that had dwindled to only two of its most storied SKUs: the Pacifica Minivan and 300 Sedan.

In less than two years, Feuell has driven those vehicles to double-digit, year-over-year revenue increases. She showed the innovative wherewithal to hybridize with electrification the Chrysler minivan—the American family type of vehicle created under the leadership of Lee Iacocca in 1983.

Back on the road

A Michigan State University graduate who was director of global marketing strategy for Ford in 2008-09, Feuell went on to major roles with Johnson Controls (vice president of strategic marketing) and Honeywell (chief commercial officer). Her growing leadership skills in sales, marketing and product management made her the choice for the Chrysler job despite having been out of the auto industry for 12 years.

"This was a great opportunity to restore an iconic brand," she said. "I found it interesting that untraditional players like Amazon and Google were getting into the automotive business to make the connected customer experience better. Artificial intelligence driving technology was changing the way that we think about mobility.

"All this technology was basically making our lives better. I wanted to be a part of that and contemporize Chrysler into a more relevant brand."

Chrysler was last to the party among automakers to electrify its products and make

Opposite page:
Stellantis Chrysler
Brand CEO Christine
Feuell displays the
Chrysler Synthesis
Concept at the
2023 Consumer
Electronics Show in
Las Vegas in January.
The seat is designed
to show off several
upcoming Stellantis
technologies,
including STLA
Cockpit, STLA Brain
and STLA AutoDrive.

C H R Y S L

S Y M P H E S I



commitments toward CO2 neutrality. Feuell feels these are the two most significant innovations the company is doing now.

It was a tall order to fulfill, but Madam CEO got on it.

Last year, Chrysler sold 34 percent more Chrysler Pacifica battery-propelled electric vehicle minivans in America than the gas-guzzling Honda Odyssey, and a whopping 164 percent more than the Kia Carnival—a third contender. This is particularly noteworthy, given that the Pacifica is the first hybrid electrified minivan—and the mainstream customer is not necessarily looking for an electric vehicle.

Understanding history

Innovative gains in just two years under Feuell's leadership have been a signature stroke.

At Ford, she led the vehicle personalization and accessories profit and loss to double the business in two years. She led the launch of its first Hybrid vehicle—the Escape—and created the product strategy for what became the Ford Edge. She even holds a patent for an invention called the Tower of Power, a standalone charging tower for retailers to keep automotive

batteries charged and ready to install and run upon purchase.

She expanded Honeywell's Momentum® software offerings to serve the full-stack needs of ecommerce, retail and logistics industries. She created a unique value-based pricing and SaaS model for bundling supply chain automation systems, software, and after-sales services to reduce customers' loan risk and improve gross profits.

But Feuell has the professional savvy to understand that innovation for innovation's sake is not always what the job requires.

Especially at Chrysler.

She has a keen understanding of what customers want and need. She walks a tight-rope of creating product,



She stepped into a legendary brand that had dwindled to only two of its most storied SKUs: the Pacifica Minivan and 300 Sedan.



marketing, and pricing strategies that do not alienate the core, steak-and-potatoes customer. She knows she is typically not catering to a customer who feels the need to keep up with the Joneses.

That's because she did her homework.

In a 2022 interview with *Forbes* magazine, Feuell said: "I took a look at some of the presentations and quotes from Walter P. Chrysler at the very beginning, and one of my favorites is that 'We will deliver quality, beauty, speed, comfort, style and power all at a low price.'

"That was very representative of what Chrysler was: an innovative company that created breakthrough solutions and features but for the mainstream market."

Even Walter Chrysler's great grandson, Frank B. Rhodes Jr., characterizes Chrysler as the "greatest blue-collar luxury auto brand."

So she is bringing in just enough innovation to where the brand can not only compete in the marketplace but win and grow market share for a heritage brand. Not an easy thing to do.

One of her big wins at Chrysler was applying a similar value-based pricing model strategy she did at Ford to create a buying frenzy that sold out a limited quantity production of 2200 cars in 12 hours flat.

Major gender inroads

Women represent less than 10 percent of executives in the automotive industry, yet more than half of licensed American drivers are women. What might we have to learn here?

Feuell doesn't overplay her distinction. She is more focused on the task at hand. There is comparatively little publicity about her, yet she is quietly building big-city, freeway-wide inroads that really matter.

A 38-year-old female maverick CEO who is also a radical minority in her oil and gas sector, Nooshin Behroyan of Paxon Energy, asked this author to ask Feuell how she got the Chrysler job—her curiosity sparked by the comment that almost every woman is buoyed by another to move into echelons such as this.

It turns out that Feuell was plucked away from Honeywell, by a fellow female recruitment

"I wanted to be a part of (the technological revolution) and contemporize Chrysler into a more relevant brand." —CHRISTINE FEUELL

professional. The Old Boys' Club is far from dead, but it is this author's personal experience and observation that in the past 25 years or so, women have finally stopped competing with other women for men's attention. Furthermore, the specter of women masculinizing themselves when competing for men's jobs in the 1980s and '90s has ceased.

After Feuell's appointment at Chrysler, 40 percent of its executive staff who oversee P&Ls are now held by women—another big two-year impact. She humbly credits the CEO of Stellantis, Carlos Tavares, who appointed her and 13 other CEOs to lead each of the auto brands.

'Be brave'

Modest and self-deprecating, she clearly is most comfortable talking about the Chrysler brand and how she can innovate and help fully restore it to its former glory.

Feuell is excited about two upcoming goals: 100 percent battery-electric vehicles by 2028, and Chrysler's first SUV. Those objectives mesh well with her advice for inventors.

"Think about the customer first. What problem needs to be solved? Build innovative and differentiating solutions around those unmet needs and be brave with experimentation.

"It's easier to fail fast or succeed with a smaller initial scope; then learn and scale."

She appears on a quick trajectory to bring back one of America's most iconic brands. Rhodes Jr. recently said of her: "Now is the time, your time ... to make the necessary changes to bring this iconic, blue-collar brand back to life."

And so, she is. 🍷

Alyson Dutch has been a leading consumer packaged goods launch specialist for 30 years. She operates Malibu-based Brown + Dutch Public Relations and Consumer Product Events, and is a widely published author.



5 THAT THRIVE

TO CELEBRATE International Women’s Day and Women’s History Month in March, *Inventors Digest* salutes these five women-owned inventions and businesses that, like Christine Feuell, seek to make history of their own.

Margaret Nyamumbo, Rowena Scherer, Brandi Pinsker, Ashli Goudelock, and the team of Jess Brecker and Kate Seamons embody the creativity, commitment and perseverance that we promote—with the goal of empowering women and increasing their participation in the invention process. Their experiences and inspirations have emanated from locales as diverse as Kenya; New York City; Amsterdam; Israel; and Greenville, South Carolina.

These success stories reflect women’s exploding contributions in accomplished innovation, which helps grow our economy and provide a better quality of life for all. —Reid Creager

Kahawa 1893

MARGARET NYAMUMBO

kahawa1893.com

Margaret Nyamumbo grew up on her grandfather’s coffee farm in Kenya. The experience never left her.

“After coming to the U.S. for college, getting an MBA and a career on Wall Street, I wanted to give back to my community. Growing up, I observed that women provided most of the labor on the coffee farms, about 90 percent in Kenya, but they didn’t always get compensated. Kahawa 1893 started off as a way to give back to the community and empower coffee farmers, and evolved into a coffee brand with a mission.”

Kahawa 1893 is a sustainable and premium coffee brand grown in Kenya and roasted fresh in San Francisco. Nyamumbo built the brand in the face of an industry that is heavily male dominated, and with very sparse representation of women and people of color.

“When I first joined the industry, the assumption of people I met was that I was a barista. In fact, in 2021, we became the first African-American and women-owned coffee brand to be nationally distributed.”



eat2explore

ROWENA SCHERER
eat2explore.com

A working mom in New York City who grew up cooking with her family in Malaysia, Rowena Scherer founded eat2explore to teach her kids—and kids around the world—about different cuisines and countries while having fun.

The subscription box service (available on Amazon) brings the food of 23 different countries to your kitchen table. Great for homeschooling, it provides tools for families to cook together, learn and dine on different cuisines and cultures.

Once kids are done exploring the country, they can track their “travels” with a sticker on their eat2explore passport and collect country flag pins. The boxes can be purchased one box at a time, or through a monthly subscription.

Her kids love Asian food. “My son’s favorite is South Korean Dakgogi/Bulgogi. It is full of flavor! My daughter’s favorite is salmon teriyaki with sautéed spinach. She is pescatarian, and so salmon teriyaki is an easy go-to and she is never tired of it.”



Project Genius

BRANDI PINSKER
projectgeniusinc.com

These puzzles and brain teasers were a natural way for co-founder Brandi Pinsker to celebrate inclusion and equal opportunities.

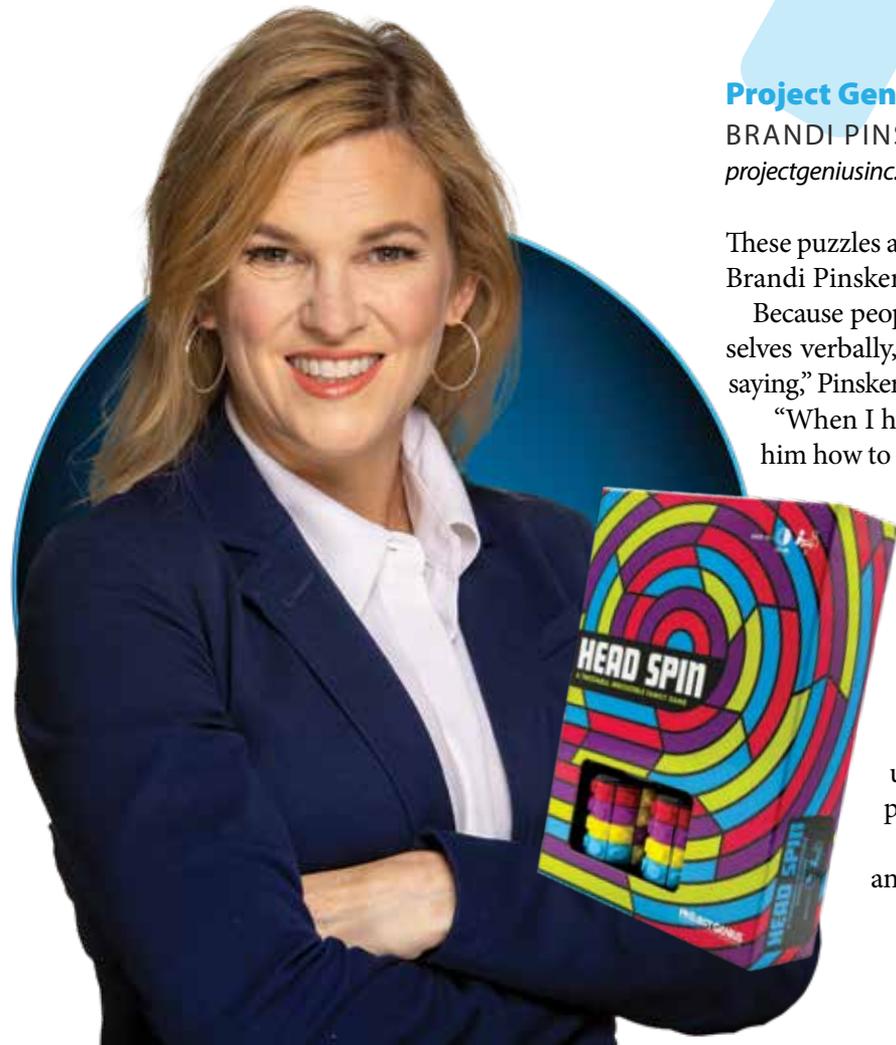
Because people with autism often are not able to express themselves verbally, “We assume they don’t understand what we are saying,” Pinsker said. “But they often do. I see this with my own son.

“When I homeschooled him during the pandemic, I taught him how to do logic puzzles. It requires a little reading, but the sentences are short and functional. He picked it up right away. ...

“I think brain teasers give these kids a chance to show us how smart they really are. When we play to their strengths, they can really shine.”

Pinsker had been working as a buyer for a chain of game and toy stores when she met an inventor in Amsterdam who wanted to distribute his puzzles in America. After starting with 12 products in 2009, the line is up to more than 80.

She finds Project Genius, available at Amazon and Barnes & Noble, “incredibly satisfying.”



Rainy Day Boxes

KATE SEAMONS AND JESS BRECKER

rainydayboxes.com

Kate Seamons was “36, alone with two little kids, and destroyed.”

Her pain was still fresh and paralyzing after her husband, Ben, died in an accidental fall in 2016. Her sister, Jess Brecker, left her a gift.

Seamons called her sister to thank her. Said Brecker: “This was the first time she called me since her husband’s death, which had happened more than a month prior. ... So I kept the rainy-day gifts coming.”

With the desire to help others enduring personal pain and loss, the sisters began their Rainy Day Boxes business in 2019. They buy their gift products from other small, female-based businesses.

Rainy Day Boxes include four handpicked gifts that are paired with a note. Each box is carefully curated to contain thoughtful and beautiful gifts that are individually packaged and meant to be opened over time.

Brecker said many recipients say their Rainy Day Box is the most thoughtful gift they have ever received. “This made me cry happy tears,” she said.



The Tsuru Company

ASHLI GOUDELOCK

thetsuricompany.com

When Ashli Goudelock visited a luxury spa along Israel’s Dead Sea, a vision came alive for her.

Inspired by the beautiful colors and textures at the spa—and the clean, high-quality products used to guide her transformative self-care experience—she has worked to bring a similar experience to the homes of modern women. Her company, founded in 2021, has a mission to instill a habitual self-care routine to promote spiritual, physical and mental well-being.

Tsuru uses high-grade ingredients and soothing properties in every product. All products, including packaging, are made “without environmental compromise.” Production and distribution are based in Alpharetta, Georgia.

Goudelock has accomplished all this while providing affordable products. Her worldwide search for trusted, top-of-the-line products “led us to working with many small businesses that we source our key ingredients from. This way our products are both highly regulated—with standards set by the European Union—with a fierce attention to producing the purest and most authentic products on the market.

“Because of our loyalty to our partners, we are offered some of the most reasonable pricing available globally for small-batch companies!”



HELLO INNOVATION

We're Enventys Partners, your one-stop partner for building new products, creating new brands and breathing life into existing ones. Our efficient, collaborative approach helps you grow your business by creating and introducing innovative new products or selling more of the ones you already have.

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Market Research



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From College Sales to Influencer

LOUIS FOREMAN'S TREK TO THE IP HALL OF FAME,
AND HIS ADVICE FOR ENTREPRENEURS

Editor's note: The following interview, conducted by Catherine Jewell of the World Intellectual Property Organization's Information and Digital Outreach Division, was first published in the WIPO magazine. It has been edited for brevity. Its full contents can be found at wipo.int/wipo_magazine_digital/en/2023/article_0002.html.

SERIAL entrepreneur Louis Foreman, founder and CEO of Enventys Partners, an integrated product design and launch company in the United States, has created multiple successful startups during the past three decades. The publisher of *Inventors Digest*, he holds over 10 U.S. patents, and his firm is responsible for the development and commercialization of more than 700 other patents. Foreman was inducted into the IP Hall of Fame in 2022.

Catherine Jewell (CJ): How did you get started as an entrepreneur?

Louis Foreman (LF): I started my first business in my fraternity room selling lacrosse equipment. I then pivoted towards selling apparel because the teams needing the equipment also needed shirts, uniforms,

hats, jackets and bags. By the time I left college, I had created the 24th-largest screen printing manufacturing business in the United States with around 300 employees and 80,000 square feet of manufacturing space.

CJ: What was your first encounter with intellectual property?

LF: After college, NASCAR racing was becoming very popular, so I started a company selling NASCAR-licensed apparel. That business grew to around \$20 million in revenue in less than two years. That was my first interaction with IP because of the trademarks and copyrights associated with sports apparel.

I went on to create custom-made soccer shin guards to prevent injuries, which I patented and licensed to almost every major soccer brand in the world. Then I started Enventys, a full-service product development and marketing agency.

I'm really passionate about IP and business, and believe it's really important to pay things forward. So for the past 30 years I have also been sharing my knowledge of IP and entrepreneurship through various university teaching roles, which I find hugely rewarding.

CJ: What does Enventys do?

LF: We handle all aspects of product development and launch. Our staff of around 80 people includes industrial designers, mechanical, electrical and biomedical engineers, and brand and marketing experts, all working under one roof. So far, we've launched almost 3,000 consumer products and medical devices, and have helped our clients raise hundreds of millions of dollars in capital to grow their companies.



We work with companies of all sizes to help them launch their products into the market. Our business model ensures there is accountability at every stage of product development and launch. Clients can pay us for the effort we invest in developing a product, or we can take ownership of the entire process and tie our compensation to the product's commercial success.

CJ: What first steps should new entrepreneurs consider?

LF: Before investing time and money in an idea, you have to determine whether it's feasible. Before pursuing your idea and starting a business, you need to answer five questions.

1. What is your product, and what makes it unique? In other words, what is going to make someone want to buy your product or service?
2. Who is your perfect customer? This will enable you to quantify the size of your market.
3. Is there demand for your product? Talk to your customers, find out if they want your product, and how much they're willing to pay for it.
4. How much money do you need? Don't start your entrepreneurial journey until you know how much capital you need to set up your business successfully.
5. Where is the funding come from? Secure funding before you start. It's much harder to attract funding at a later stage, especially if your business is suffering.

CJ: Is crowdfunding a route to setting up a business?

LF: Crowdfunding is a good way to get market validation and proof that there is demand for a product, which can lead to investor participation.

While it's a way to get initial funding, crowdfunding is not enough to run a business. With a crowdfunding campaign, you're pre-selling your product, so you have a responsibility to use the money raised to make and deliver it. The small margins you make in doing that won't be enough to sustain a company.

CJ: Why is IP so relevant to the long-term success of companies?

LF: IP is our incentive to innovate. When you

look at the risks associated with launching a business and bringing a new product to market, you need some ability to prevent others from copying what you've created. Without IP, the formula entrepreneurs use to determine return on investment is altered to the point where there's no reason to invest.

IP is the underlying asset we leverage to start a company, to invest our own time and capital to build a business, hire employees, and launch new products and services. Without that incentive, it would be up to governments to subsidize invention, and governments are not great innovators.

CJ: What common IP mistakes do companies make?

LF: A big mistake is destroying the novelty of an invention before seeking protection. Many entrepreneurs and inventors don't understand IP and don't know what they don't know.

They build a prototype and offer it for sale. Then, a few years later, after raising some capital, they try to patent it, only to discover it's no longer patentable. Or they rush to file a patent without doing a prior art search and spend a lot of money filing a patent for something that already exists.

CJ: What's the key to building greater understanding of IP?

LF: Education is the key to filling the IP knowledge gap. Today, most universities offer entrepreneurship classes, but few go into any depth on IP. We should be incorporating IP into the curricula of high schools and middle schools, because IP is incredibly important and touches so many activities.

CJ: What's your advice on developing an IP strategy?

LF: Think about IP before you even start your company. Surround yourself with people who have done it before. Surround yourself with a team that complements the skills you have. If you're the visionary inventor, focus on the invention and let others protect the invention. If you're the great salesperson but not great at product development, find the people who can do that for you. ☺

Bangkok Bootcamp

INNOVATION TRAINING PROGRAM THRIVES IN AN ENERGIZED, INSPIRATIONAL ENVIRONMENT **BY JEREMY LOSAW**

A **STHE SONG** “One Night In Bangkok” rang in my ears, I recently touched down at Suvarnabhumi Airport in the Thai capital. With fresh ink from my new passport stamp and a few thousand Thai Bhat in my pocket, I was ready to deliver another international innovation training program.

This program, my first in Asia, was an opportunity to work with a completely different culture and see how the Thai people—with such a rich history and culture—work and innovate.

We focused on the challenge of urban farming. It was an apt topic for the burgeoning urban jungle that is Bangkok, and the participants in the bootcamp developed some great concepts and prototypes in just four days.

Fortunately for me, unlike Murray Head, the only thing walking next to me were my friends on the way to eat wonderful Thai food every night.

with innovation and wanted to bring the Fab Lab ethos back to Thailand.

In 2012 in Tokyo, Kovidvisith and a partner started the first Fab Café—which, as the name suggests, combines the community aspect of a café with the tools and resources of a maker space. Shortly after, Kalaya moved back home to open the Bangkok office. The company has since expanded across the globe with offices in Mexico, France, Spain, and across Asia.

Fab Café works to support teams in their local communities to solve big challenges that include hosting hackathons, building robots, and working on alternate reality projects.

An opener for context? Boom!

Each of our training programs focused on a challenge. For this session, the question was: “How might we use technology to improve urban farming in Bangkok?”

Given that Bangkok is such a huge, sprawling metropolis with few green spaces, mental wellness and proper nutrition can be a challenge. Urban farming in its various guises has the potential to keep the populous well fed and improve the general quality of life.

To illustrate the point, we kicked off the bootcamp with a talk from an expert in urban farming, Athivach Pongsattasin. Nicknamed “Boom,” he has a company, Insector, that specializes in urban insect farming and creating food and wellness products from them.

He showed off a terrarium of black soldier fly larvae that can consume food waste as they grow from pupae to larvae, before they mature to their pre-metamorphosis state. They are then harvested and processed into oils and other products used for human and pet consumption.

Boom also raises crickets for sale as a food product for human consumption. His talk kicked off the challenge and provided the



Above: This team built a prototype of an IoT-powered Wolffia (edible microplant) grow tank.

Opposite page: Bangkok native Kalaya Kovidvisith (front row, fourth from left), who operates the Fab Café, was instrumental in enabling the innovation training.

Fab environment

Our program was hosted by the maker space and innovation hub Fab Café, located in the Thailand Creative & Design Center. The space was well lit with natural light, and decorated with various prototypes such as 3D-printed ceramics and self-driving robots that looked like cats—a backdrop of inspiration for the creative spirit. It was equipped with a cornucopia of prototyping tools and supplies, a perfect environment for creative thinking.

Fab Café is run by Kalaya Kovidvisith who was a warm and gracious host as well as a prototyping and development rock star. A native of Bangkok, she studied architecture at MIT and became familiar with the Fab Lab movement that was started there. She became obsessed

insight the participants needed to understand the challenge, and to appreciate the depth of the potential impact.

Prototyping in 1.5 days

Then, it was off to work.

Our 30 participants were divided into five groups of six members. I presided over an electronics lab with them to show the power of block coding with the Adafruit Circuit Playground Express development boards, as well as how easy it is to use Particle WiFi devices to build IoT-enabled products. Then, my colleagues Eric Gorman and Julia Jackson took over, guiding attendees through the design sprint process to come up with solutions to the challenge.

Their objectives were to define the challenge and the focus point, empathize with stakeholders, weigh potential benefits and risks, and learn how to work alone but together to zero in on a viable solution to improve urban farming.

On Day 3, we were ready to prototype. Teams were given only a day and a half to develop compelling prototypes to convey their concepts, and to get feedback from potential users.

With the help of the laser cutter and other tools at Fab Café, the teams built some stunning prototypes that covered a broad spectrum of urban farming applications. Some teams focused on novel ways of cultivating bees and/or plants, at-home wine making, cultivation of Wolffia

microplants for food; another team focused on cultivation of aqua plants for improved mental health to provide respite from the hustle and bustle of Bangkok.

Teams then presented their solutions and prototypes to their peers—as well as representatives from the U.S. Embassy, whose generous funding enabled the program and provided it for free to Thai citizens.

Gratifying results

I have been fortunate to be granted the opportunity to travel and deliver innovation trainings all over the world, with Thailand the fourth continent to welcome my team. It has been fascinating to see how different cultures work and attack a challenge that requires teamwork and innovation.

I was blown away by Thai participants' careful consideration of all aspects of the challenge and ability to empathize with stakeholders. They were a highly creative and driven group.

I was amazed how quickly they were able to build great prototypes and bring their solutions to life. 🌱

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



The challenge: “How might we use technology to improve urban farming in Bangkok?”





A Settlement, and a Jump Rope

DEAL HAS A STRONG MESSAGE TO INFRINGERS; KNOCKOFFS CASE POSES INTERESTING QUESTION **BY LOUIS CARBONNEAU**

A COUPLE OF interesting stories caught my attention recently.

First, there was an interesting announcement by Nanoco Technologies, backed by litigation funder GLS Capital, that announced a settlement with Samsung. What's surprising is, it disclosed the actual amount (\$150 million) of the settlement in the press release, which is very rarely accepted by defendants (and what I assume was a condition for Nanoco to do the deal itself).

I surmise that it was meant to send a message to other infringers who will likely be the next targets in the campaign. Yet it does offer a peek behind the curtain on settlements and shows that clearly, some very large amounts of money change hands outside of a court verdict.

This suggests that many other settlements where specifics were not disclosed may be as large or even larger than some of the reported court decisions. And contrary to verdicts, settlements do not get overturned or reduced on appeal!

There is also an interesting potential development brewing that could have a significant impact on how people value risk—and patents themselves, if the U.S. Supreme Court steps in.

It all started with a jump rope.

Molly Metz is a former five-time jump rope world champion and inventor of a much-improved jump

rope. US inventors did a great short movie about her story.

She sold a ton of those until the knock-offs appeared on the shelves. When she sued for patent infringement, she was taken to the Patent Trial and Appeal Board, which recently invalidated her patents (surprising, right?). If you want to know what is broken with the U.S. patent system, this is Exhibit A.

Molly's attorney is now raising the interesting argument that damages incurred by infringing products prior to the cancellation of the patents should still be accounted for—just as someone should still pay for having access to magazine, or streaming channel, prior to cancelling membership. In other words, cancellation of a patent by the PTAB should not have any retroactive effect.

This is actually the way things work when a patent expires naturally, as the owner can still sue post-expiration for damages incurred during the last six years when the patent was still in force.

The U.S. Supreme Court will soon have the opportunity to decide if it wants to entertain this argument and hear the case on the merits.

If it does, there will be wide speculation that could create some turmoil in the market. Companies may suddenly face a risk that patent invalidation only really stops the bleeding in terms of future royalties but doesn't really affect past damages, which usually account for the lion's share.

To be followed closely. ☞

Molly Metz's case could have a significant impact on how people value risk—and patents themselves, if the U.S. Supreme Court steps in.





MORE PREDICTIONS, AS PROMISED

LAST MONTH, I examined my 2022 predictions and concluded I had gotten at least seven of 10 right. This is a hard act to follow, so I said I will limit myself to only five this year.

I first did what any teenager would have done with a last-minute assignment. I simply asked ChatGPT to make five predictions for me for the patent market in 2023.

Here is what I got. (There was a full paragraph for each of the following, which I am skipping here, but you can try at home.)

- Growth in the number of cross-border patents;
- Increased demand for patent licensing;
- Greater importance of patent litigation;
- Growth in demand for patent valuation services;
- Emergence of new patent markets.

Not bad, but a bit too generic for my taste. We'll try again next year. Now on the real stuff:

1 The patent market will continue to split in two opposing segments. The first one (going down) is where operating companies acquire assets. Corporate patent budgets are down in 2023, people in IP departments with vast institutional knowledge are being laid off, and it is hard enough to justify the cost of maintaining—let alone growing—one's portfolio organically.

Plus, why buy when you can use the PTAB and the court system to drag things out over a decade?

The second one (going up) is made of well-funded NPEs (non-practicing entities) that have access to vast amounts of cash to feed their assertion programs. This trend will likely accelerate in a down economy as money managers are looking for alternative opportunities—playing patent litigation roulette always looks enticing from the outside.

2 The U.S. Supreme Court will screw inventors once again, this time over the concept of enablement. We all know by now the carnage it left in its wake with the 2014 *Alice* doctrine.

Watch out now for the *Amgen v. Sanofi* case that it scheduled to be heard during this session.

Here is the issue: "Whether enablement is governed by the statutory requirement that the specification teach those skilled in the art to "make and use" the claimed invention, or whether it must instead enable those skilled in the art "to reach the full scope of claimed embodiments" without undue experimentation—i.e., to cumulatively identify and make all or nearly all embodiments of the invention without substantial "time and effort."

This may sound technical for the uninitiated. But if it elevates the current burden, it is yet another tool offered to defendants to challenge the validity of any issued patents after the fact. As if they needed more ...

3 The U.S. Congress will manage to pass no legislation on patent rights during the current session. I know: It is almost too easy to predict, but with the Republican Party winning back the House, U.S. Rep. Darrell Issa of California became the new House IP Subcommittee chairman—despite US Inventors putting up a good fight to defeat him based on his track record of pushing patent rights averse to inventors.

So, this could give a second life to some bills that have been on the back burner for a while. However, with Sen. Patrick Leahy (D-Vermont) leaving the Senate, the opposite is happening at the Senate level. Inventors now have a friendlier audience with Sens. Thom Tillis (R-N.C.) and Chris Coons (D-Delaware) back to lead the Senate Judiciary Subcommittee that is responsible for IP matters.



So, it is doubtful that both sides will agree to pass similar legislation. And since it takes all the stars to be perfectly aligned in Washington to pass any bill, I predict that some version of it might pass either the House or the Senate—but not both, which is required in the United States to become law.

4 A flood of patents owned by failed startups will be sold to NPEs and feed the new wave of patent litigation.

We saw this phenomenon in 2001 when the dot.com bubble burst, and again in 2009—although the legal environment was a lot more conducive to asserting patents at that time.

Each time there is a recession, many companies buckle up, and all that is left for their investors to capitalize on are their intangible assets—primarily patents. Feed this into a market where NPEs can buy on the cheap and find ample funding for their campaigns; it's just too hard to resist.

5 Most people will opt out of the United Patent Court in Europe.

I've commented several times on the ever-changing date for the

official start of the long-awaited UPC. For sure, it is coming this year to a theater near you!

But the devil you know is sometimes better than the one you don't, and I suspect that many large patent owners who assert their assets in Europe will take their time and observe how things unfold before embracing this new tribunal.

And a bonus one: As a result of the ChatGPT frenzy, AI will become more tightly integrated into patent analytics software tools, because people will demand it. And maybe someday, there will be one of those expensive software packages that will actually guess right and find the proverbial diamond in a pile of coal.

Meanwhile, we all get to keep our jobs for at least another year!

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.



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Uh, Hello!

FOUNDATION'S REPORT IS A WAKE-UP CALL REGARDING U.S. PERCEPTION OF CHINA AS INNOVATION RIVAL

BY STEVE BRACHMANN

All Eye on Washington stories originally appeared at IPWatchdog.com. Get your tickets for the in-person Artificial Intelligence Masters program, March 7-8 in Ashburn, Virginia, at ipwatchdog.com/artificial-intelligence-masters-2023.

THE INFORMATION Technology & Innovation Foundation recently published a report entitled “Wake Up, America: China is Overtaking the United States in Innovation Output,” which applies innovation and industrial performance metrics for comparing relative innovation outputs from foreign technological rivals China and the United States.

The report, released January 23 and produced by ITIF’s Hamilton Center on Industrial Strategy, is the latest indicator that China is close to surpassing the United States in terms of innovation output per capita. It calls on U.S.

policymakers to develop a national economic and technology policy to restore U.S. dominance in innovation.

Despite the country’s longstanding and well-earned reputation as a major source of piracy and IP infringement, China has made great strides in encouraging patent application filing activity in recent years by relaxing patentability standards for software inventions and increasing damages awarded for patent infringement.

Annual patent reports by the World Intellectual Property Organization and the European Patent Office have noted stark rises in the number of worldwide patent applications being filed by Chinese entities. Although the quality of those patent filings has been questioned, China has made technological advancement a key part of national strategies such as the Made in China 2025 initiative.

Eye-popping numbers

The ITIF report says China’s efforts in advancing domestic innovation is not only helping the country outpace the United States in total innovation output, it is also helping China achieve equal footing with America in innovation output by population.

Between 2010 and 2020, the ITIF reports China’s innovation and advanced-industry capabilities—which include R&D expenditures and patent outputs—increased from 78 percent of absolute U.S. output to 139 percent of absolute U.S. output. When taking into account the larger size of China’s economy and population, China’s innovation capabilities increased from 58 percent of U.S. capabilities in 2010 to 75 percent of U.S. capabilities in 2020.

In recent years, China has made significant progress in each of the innovation indicators measured by the ITIF study—including innovation inputs, innovation outputs and innovation outcomes.



Among innovation inputs, the ITIF notes that China has made great strides in the number of domestic companies making the world's greatest investments into research and development.

In 2010, only 19 Chinese companies were listed in the EU Industrial R&D Investment Scorecard rankings of the top 1,400 R&D investment companies worldwide. That number increased to 278 Chinese companies ranked in the scorecard's top 1,400 listing in 2020. By contrast, the number of U.S. firms ranked in the top 1,400 declined from 487 in 2010 to 449 in 2020.

Though its number of graduates per capita still lags behind the United States, China is seeing a larger number of college graduates than the United States in terms of total numbers—another innovation input metric tracked by the ITIF report.

The Information Technology & Innovation Foundation's report is the latest indicator that China is close to surpassing the United States in terms of innovation output per capita.

In 2018, Chinese universities conferred nearly twice the number of total undergraduate degrees than colleges in the United States, and more than double the number of science and engineering undergraduate degrees (1.81 million Chinese degrees versus 0.81 million U.S. degrees). Also, although venture capital investment in China dropped sharply from 2018 to 2019, China's VC investments reached nearly 90 percent of similar investments in the United States in 2016.

ITIF reports that China remains the world's second-largest VC market as of 2020. 📌

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.



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Best wishes, Jack Lander

IoT Corner

The seventh annual 2023 **IoT Breakthrough Award** winners were announced in January. The third-party industry awards recognize creativity and high performance in IoT, from consumer to enterprise applications. More than 100 awards across 10 categories were presented.

Notable winners include Arlo for the Connected Home Company of the Year, GE for Smart Appliance Company of the Year, and Apple winning a few awards for its consumer products. The awards are open to individuals, companies and organizations working in the IoT space. —*Jeremy Losaw*



Wunderkinds

Rafaella de Bona Gonçalves from Brazil was the 2022 European Inventor Award Young Inventors Prize runner-up. She developed biodegradable sanitary products for disadvantaged groups in her country, using harvest waste.

Initially, Rafaella designed a toilet paper-style roller that unspools absorbent sheets, which can be rolled into tampons. Then she developed another product that can be used as a sanitary pad or converted into two tampons. The products are sustainable and free to those who cannot afford them.



What IS that?

Life is hard. Imagine: You're sitting at the beach on a day when the sun is so bright, you can't read what's on your cellphone! The umbrella shades your phone with the goal of ending that abject horror. The piggy-shaped suction cup mounts to the back of your phone to enable the process. You have to pay for your own mai tais, though.

608

The number of **patents granted to Bank of America** in 2022—a 19 percent increase from the previous year—in a year that the USPTO granted 1 percent fewer patents overall.

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WHAT DO YOU KNOW?

1 Which is not a trademark owned by the National Collegiate Athletic Association in connection with this month's basketball tournament?

- A) March Madness
- B) March to the Madness
- C) March Madness Experience
- D) March Madness IP Paranoia

2 **True or false:** Martin Cooper, credited with inventing the first mobile cellular phone 50 years ago (*Inventors Digest*, April 2021), was buried with that phone.

3 **True or false:** Raquel Welch held trademark rights connected to her iconic movie "One Million Years B.C."



4 When was the electric ceiling fan invented?

- A) 1882
- B) 1916
- C) 1931
- D) 1942

5 Which was invented first—the fingernail clipper, or the nose hair trimmer?

ANSWERS: 1. D. You get the idea. 2. False. Not yet, anyway; he is alive as of this writing and would turn 95 in December. 3. False. But the question sounded good. 4. A. Earlier models used a belt system that ran on steam energy. 5. The Decorabilia blog says nose hair trimmers were invented in 1859 by Dr. Jefferson Entwistle of Kennebunkport, Maine. "His earliest model was powered by foot-bellows. The user would step in place on the bellows while trimming, and the forced air would spin a propeller-shaped blade, which the user would gently apply to the nostril region." The first patents for fingernail clippers started appearing in 1875.

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