IN COOPERATION WITH USPTO UNITED STATES PATENT AND TRADEMARK OFFICE

JUNE 2022 Volume 38 Issue 06

CONTRACTOR DIGEST

NOC YES!

THE SURPRISING ORIGINS AND REVIVAL OF THE BOBBLEHEAD

Your Path to Profit

8 WAYS TO MONETIZE YOUR INVENTIONS

Develop Your IP Id

HOW TO CRAFT AND EXECUTE YOUR STRATEGY





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Learn from accomplished inventors and entrepreneurs at Invention-Con 2022: Inspiring and redefining the innovative mindset, coming August 10 - 12 from 1-5 p.m. ET daily.

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Be sure to register early, and check out previous Invention-Cons at www.uspto.gov/inventioncon.

Invention-Con is the USPTO's annual conference for independent inventors, entrepreneurs, and small business owners whose success depends on guarding their creative work.

This program is presented by the USPTO's Office of Innovation Outreach. For more information, please contact **inventioncon@uspto.gov.**



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Give no quarter to Patent Pirates.

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



SaveTheInventor.com

Twenty-seven

including Super

Soaker inventor

innovation pioneers,

Lonnie Johnson (left)

Margaret Wu (right),

and industrial chemist

were honored as Class

of 2022 inductees on

May 5 in Washington, D.C. Past inductees

were also celebrated-

including Art Fry

co-invented.

(2010), showing off the Post-It Note he



NEWS FLASH

Inductees Will Shine Forever

Latest National Inventors Hall of Fame honorees celebrated

B EFORE the induction ceremony and blacktie dinner, before their place in innovation history was officially celebrated, their legacies became part of a permanent light.

On May 4, recent National Inventors Hall of Fame inductees placed their names on illuminated hexagons in the Gallery of Icons exhibit at the NIHF Museum in Alexandria, Virginia. The ceremony forever commemorated their induction into the Hall of Fame.

The following night, 27 invention pioneers were honored as Class of 2022 inductees during "The Greatest Celebration of American Invention." The event, in partnership with the USPTO, was held at The Anthem in Washington, D.C.

The Class of 2022 includes engineer Marian Croak, for her work on advancing Voice Over Internet Protocol (VOIP) technology that is vital to remote work and conferencing as well as for personal communications; Lonnie Johnson, inventor of the Super Soaker toy that has generated more than \$1 billion in sales, and a prominent researcher in energy technology; Dr. Patricia Bath (posthumous), inventor of Laserphaco cataract surgery; Carl Benz (posthumous), the first person to design a car around the internal combustion engine; and James Buchanan Eads (posthumous), who in the 1880s

created a series of inventions that improved transportation and the military defense of the Mississippi River region.

During her remarks, new USPTO Director Kathi Vidal said: "Although each of these inventors has a unique background story, what they all have in common is that they worked within the intellectual property system that was created by our founders, and is written directly into Article 1 of the U.S. Constitution itself. Your work—and the patents that you have received—lay the foundation for future invention."

Lisa Lindahl, co-inventor of the first sports bra and one of the new inductees, said she hopes the national recognition "serves to inspire and empower other women and girls, like me, with a disability. It is often that varied disability, that differently abled, that bursts the new and different perceptions, new ways of looking at old problems, creating new solutions for our world, for the future of our children."

Danica McKellar, star of the TV show "The Wonder Years" and author of the best-selling "McKellar Math" books, was master of ceremonies.

For a complete list of the latest inductees: invent.org/inductees/new-inductees



You Spoke. We Listened.

User comments prompt changes in new patent application filing format

FEW YEARS AGO, the USPTO advanced its efforts to use all available technology to strengthen patents and reduce pendency times by introducing the DOCX format for patent application filings. DOCX is a widely available word-processing file format supported by many popular applications such as Microsoft Word 2007 or higher, Google Docs, Office Online, Pages for Mac, and LibreOffice.

The USPTO sought feedback on the transition to DOCX. Amid concerns that the new format might result in conversion discrepancies, the agency recently announced an interim, optional procedure to ease the transition.

Through Dec. 31, 2022, applicants may upload a backup PDF version of their application with their DOCX version for free. And there is no obligation to provide a backup PDF.

Applicants can be assured that should there be any conversion discrepancies, they can rely on the backup PDF to verify the substance of their original filing. You can read more about the backup PDF in the Federal Register: federalregister.gov/documents/2022/04/28/2022-09027/filing-patent-applications-in-docx-format

This new option builds on the USPTO's other transition-easing initiatives. These include delaying the effective date of the non-DOCX surcharge fee from Jan. 1, 2022, until Jan. 1, 2023, to allow more time for users to adapt, and adopting submitted DOCX files as the authoritative document to simplify the filing process.

Filing in DOCX offers many advantages, including increased efficiencies that eliminate the need to convert structured text into a PDF for filing. Its superior data quality reduces errors that can occur when converting to a PDF file.

Also, DOCX's smarter interface detects common errors, such as formatting errors, and provides instant feedback to prevent unnecessary delays in processing an application. It provides better privacy via automatic metadata detection (e.g., track changes and comments) and removal features to support the submission of only substantive information in the DOCX file.

If you need assistance, contact the Patent Electronic Business Center at **ebc@uspto.gov** or **866-217-9197**. Send your additional feedback, suggestions, and questions to **eMod@uspto.gov**.

WHAT'S NEXT

PROUD INNOVATION:

This virtual series celebrating LGBTQIA+ inventors,



entrepreneurs, and small business owners starts June 15, from 3 to 4:05 p.m. ET. Panelists will discuss how their education and experiences help them improve technology, rethink challenges, and transform new ideas into realities. Panelists include: Arianna T. Morales, Ph.D. and staff research scientist, General Motors R&D Center; Suma Reddy, cofounder and CEO, Future Acres; David Taubenheim, senior data scientist, NVIDIA; and Theodore "TJ" Ronningen, Ph.D., chair of Out to Innovate and research scientist, Ohio State University.

The second program will be June 22, also from 3 to 4:05 p.m. ET. The subject will be what it takes to turn individual passions into entrepreneurial successes. Panelists include: Jake Kenyon, owner/lead dyer at Kenyarn, LLC; Robin Williams, owner of Bowtie Behavior; Phillip Bailey, director of strategic initiatives at the Wisconsin LGBT Chamber of Commerce.

Find the full agenda and register at **uspto.gov/ about-us/events/proud-innovation-event-series**.

NATIONAL SUMMER TEACHER INSTITUTE (NSTI):

The USPTO Office of Education will conduct a virtual program for teachers involving innovation, science, technology, engineering, and mathematics (STEM), and intellectual property during the week of July 25-29.

NSTI combines experiential training tools, practices, and project-based learning models to support elementary, middle, and high school teachers and increase their knowledge of inventing and innovating.

The central focus of NSTI is to create and protect intellectual property—including inventions, knowledge discovery, creative ideas, and expressions of the human mind that may have commercial value and are protectable under patent, trademark, copyright, or trade secret laws.

For more information, visit uspto.gov/teacherinstitute, or contact NSTI_Applications@uspto.gov.

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

Know Your Dispute Forums

Several tribunals can rule on legal challenges that involve issued patents

F YOU FIND yourself in a patent dispute that leads to a legal challenge, you can benefit by knowing the inner workings of the various tribunals that can rule on them.

These forums include federal district courts, the Court of Federal Claims (CFC), International Trade Commission (ITC), and Patent Trial and Appeal Board (PTAB).

Although the tribunals discussed here have some overlap in the scope of matters decided, they are not necessarily exclusionary—i.e., the same patent may be subject to proceedings in multiple forums.

A final decision from any of these forums can be appealed to the Court of Appeals for the Federal Circuit. Following a decision by the Federal Circuit, a losing party may request review by the Supreme Court (which is rarely granted).

Federal district courts allow suits for patent infringement by patent owners, as well as patent validity challenges by third parties. A successful patent owner may be awarded monetary damages and/or injunctive relief (preventing the infringer from further use of the patented invention). Federal judges often do not have a scientific or technical background and regularly hear many types of cases, besides those involving patents. More information: January 2022 issue of *Inventors Digest* on these USPTO pages.

The **Court of Federal Claims** is a special federal court that hears monetary claims against the U.S. government. In the patent context, the CFC has exclusive jurisdiction over patent infringement suits against the government. In these suits, the government "waives" its "sovereign immunity" from being sued.

A prevailing patent owner is entitled to monetary damages only (rather than injunctive relief). Judges at the CFC tend not to have a scientific or technical background, and handle various subject matter in addition to patent issues. More information: uscfc.uscourts.gov/about-court

The **International Trade Commission** is a federal agency that decides certain issues involving trade.

Here a patent owner can be awarded injunctive relief in the form of an "exclusion order" (as opposed to money damages) for patent infringement. An exclusion order prohibits entry of infringing articles into the U.S. and is a powerful remedy.

Patent-based ITC investigations can involve issues of infringement, validity, and remedies (among others). Administrative law judges conduct proceedings and often have a technical or scientific background, as well as prior experience in intellectual property law. More information: usitc.gov/press_room/about_usitc.htm

The Patent Trial and Appeal Board is an administrative tribunal within the United States Patent and Trademark Office. The PTAB adjudicates only patentability issues; it does not address infringement or damages. In post-grant review proceedings involving issued patents, a challenger files a petition arguing that a patent's claims are unpatentable (and thus should not have issued in the first place).

PTAB proceedings are handled by administrative patent judges, who have scientific or technical backgrounds. More information: **uspto.gov/patents/ptab**





TRADING CARD

NO. 11 Dean Kamen

D EAN KAMEN said his grandfather once told him: "You give until it hurts. If it doesn't hurt, you didn't give enough."

So, as he told "CBS Sunday Morning," "I said to my grandfather, 'All right. I will give more than I take."

The holder of more than 1,000 U.S. and foreign patents has lived up to his pledge in world-changing ways.

Best known as the inventor of the Segway—a motorized personal vehicle that fell short of some expectations it would replace the automobile—Kamen also developed many revolutionary medical devices; the IBOT Mobility System, an all-terrain electric wheelchair that puts disabled riders at eye level with people who walk; the Slingshot, a portable water purifier to address water-quality issues in underdeveloped countries; and founded FIRST (For Inspiration and Recognition of Science and Technology), an organization intended to build students' interests in STEM disciplines.

Kamen was awarded the National Medal of Technology in 2000. He received the Lemelson-MIT Prize in 2002 and was inducted into the National Inventors Hall of Fame in May 2005. These and many honors come from putting others first.

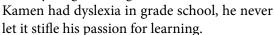
So FIRST Robotics, founded three years after the parent organization's inception in 1989, is a fitting moniker and an important part of Kamen's legacy.

"The average kid on the street can tell you the name of a dozen football players, or basketball players, or Hollywood stars," Kamen said. "None of them can tell you the name of any famous or living scientists or engineers."

The USPTO works with FIRST Robotics, which today hosts an international competition that has attracted well over a million youths from more

than 100 countries—and resulted in many patented inventions. The USPTO also works with another Kamen-associated event, the Global Innovation Award, which also honors youth innovation. Kamen will speak at this year's event, June 21-23 in St. Louis.

His commitment to student innovation may have been fueled when he was young. Although



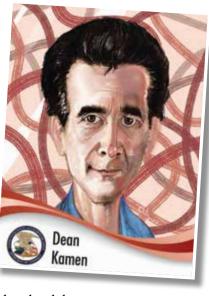
He was a college undergraduate when he invented the first wearable infusion pump, which gained acceptance throughout diverse medical specialties. He was 25 when he founded his first medical device company, AutoSyringe, to manufacture and market the pumps. Working with leading diabetes researchers, Kamen oversaw the design and adoption of the first portable insulin pump.

He later founded DEKA Research & Development Corp. to develop internally generated inventions and provide research and development for major corporate clients.

The embodiment of youthful energy at 71, Kamen told Qualcomm Technologies in 2018: "We have more problems than we've ever had; we're not going to solve them in a world of stuff.

"We'll solve them with a world that becomes more and more and more about ideas."

This year marks the 10th anniversary of the USPTO trading cards. Requests for the cards can be sent to **education@uspto.gov**. You can also visit them at **uspto.gov/kids**.



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EDITOR'S **NOTE**



Uh, Hold On: That's A Pretty Big Niche

We're not here to make fun of Nokia. The company has a slew of major accomplishments in the electronics and communications arenas.

Let's just say that the Finnish megacorp has an irony-laden history with the cellphone that is a lesson for inventors: Never hang up on an interesting idea.

Forty years ago marked the launch of Nokia's first "mobile" phone if you were wearing a truss. Its boxy Mobira Senator, marketed for in-car use, weighed 22 lbs.

It's not hard to imagine someone holding one of these in the front passenger seat and feeling the car start to tip over like the Flintstones with a ginormous rack of ribs.

(And as is the case with many of the older cellphones, this one is a collector's item. If you've got a spare \$2,500 lying around, you can grab one on eBay.)

One wonders how many Senators were made—and how many internal vetoes had to be overridden. At the time, Nokia executives said mobile phones were James Bond-like "improbably futuristic and niche devices," according to phonearena.com.

But maybe someone had been watching too many "Get Smart" reruns. Even if Agent 86's shoephone never caught on, the future would reveal mobile communication to be a more than viable idea.

And where did we get the first proof of this? From Nokia.

By 1998, the company—founded in 1865 as a pulp and paper manufacturer—was the No. 1 seller of cellphones and had just sold its one millionth. The Android operating system and iPhone eventually combined to topple it from the upper echelon of the cellphone hierarchy, but Nokia's strong presence in the market for a decade was unlikely after such an unenthusiastic start.

We've saved the best irony for last.

Last fall, the company trumpeted the fact that its "smartphones with the Nordic design, including the well-known Nokia 3310 phone," would appear in a major feature film.

That film? "No Time to Die." It's the 25th James Bond movie

—Reid (reid.creager@inventorsdigest.com)

Inventors

EDITOR-IN-CHIEF REID CREAGER

> ART DIRECTOR **CARRIE BOYD**

CONTRIBUTORS

STEVE BRACHMANN **ELIZABETH BREEDLOVE LOUIS CARBONNEAU JACK LANDER JEREMY LOSAW APRIL MITCHELL EDIE TOLCHIN**

GRAPHIC DESIGNER

JORGE ZEGARRA

INVENTORS DIGEST LLC

PUBLISHER LOUIS FOREMAN

WEBSITE ADMINISTRATOR **ELIZABETH BREEDLOVE**

FINANCIAL CONTROLLER DEBBIE MUENCH

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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):*

"Your USPTO: Trading Card No. 12, Elijah McCoy" (February 2022):

I am so intrigued by your site and would love to acquire the trading cards.

Elijah McCoy came up as a "Google of the Day," and that is how I found out about you.

-WENDY S. JACKSON

Editor: USPTO trading cards are a monthly feature on the Your USPTO pages in Inventors Digest. The USPTO launched the Inventor Collectible Card Series in 2012 at the USA Science and Engineering Festival. Requests for the cards can be sent to education@uspto.gov.

"5 Tips for Great Product Photos on Social Media" (August 2018):

The best way to take amazing pictures is to act natural and pretend you are not having a photo taken. Your pictures will look much more realistic and beautiful.

Thanks for sharing these great tips! -EDITPATHS@GMAIL.COM

"A List of U.S. Startup Competitions" (February 2018):

It would be nice if there was a place where inventors can hook up and do projects and share ideas.—CHRIS ROBERTS

Editor: There are many! Go to inventorsdigest. com, click on Resources on the homepage, and scroll down to find Inventor Organizations. Know that some of these may have outdated information; we cannot constantly monitor all of them for updates, so we rely on those groups to keep us current.

UBER FACES \$250 BILLION TRADEMARK SUIT

If you notice Uber fares increasing, it may be because of more than its recent announcement to lay off 14 percent of personnel. Or soaring gasoline prices. Or the fact that year-over-year U.S. inflation recently reached 8.5 percent the highest rate in 40 years.



After all, somebody has to pay for the rideshare giant's spiraling legal fees, thanks to recent trademark disputes.

The latest challenge occurred May 12, when a California travel accommodation and real estate company called UberRE sued Uber Technologies in U.S. District Court for the Northern District of California. UberRE accused Uber of violating its trademark rights with a new "Uber Travel" trademark application and services that would unfairly compete with its business.

Reuters reported that UberRE bought an "Über" trademark for real estate services in 2017 and uses the name on software for booking travel accommodations. It claimed damages of more than \$250 billion—more than five times Uber Technologies' current market capitalization.

UberRE advertises vacation rentals through an "UberBnB" app, as well as through a website that prominently describes its trademark ownership. UberRE Inc. Chairman Brent Ritz told Reuters that Uber Technologies breached an agreement with the Menlo Park company, but he did not go into detail. There has been no response from Uber Technologies.

Uber Technologies was previously sued by New York ad agency Uber Inc. over its planned expansion into the advertising business. The companies resolved that dispute in November. The ad agency said it has been using the Uber name since 1999.

Uber has also been besieged with complaints about sexual assault and dangerous drivers. A report in 2019 showed that passengers (and some drivers) reported almost 6,000 cases of sexual assault in 2017 and 2018 combined.

CONTACT US

Letters:

Inventors Digest 520 Elliot Street Charlotte, NC 28202

Online:

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.

BRIGHTIDEAS

Mochi Robot

LEGO-COMPATIBLE, SCREENLESS CODING FOR KIDS 3-6 learnwithmochi.com

Mochi teaches children coding concepts through engaging plot lines as they learn ABCs, 123s, words, numbers, colors and more. It also allows you to design new costumes and accessories.

Mochi comes with up to 12 adventures. Each adventure is comprised of a story book, a matching story map, and coding blocks unique to that adventure. The coding blocks help kids create algorithms.

Write a program, and the Mochi bear/robot will execute it. Kids can also explore adventures from the Mochi Story Library to enrich the learning experience.

Two sets of Mochi plus six adventure packs will retail for \$948.



"Rebels revel in rewriting reality's restrictions."

-RYAN LILLY

Shine Turbine

WIND TURBINE FROM YOUR BACKPACK shineturbine.com

This compact, 40-watt, lightweight turbine (under 3 lbs.) allows you to charge a phone, GPS, or any other handheld electronic device. The mount and blades all collapse into its housing.

Powered by a built-in, 12,000 mAh battery, the turbine starts in a gentle breeze and has an 8-28-mph wind speed range. Its makers say it can collect three phones' worth of power in an hour at maximum rated wind speeds. You can even precharge it in a wall outlet before leaving home.

Shine is great for outdoor activities, or in preparation for a power emergency. It is easy to set up and take down, with no loose parts to lose.

The product retails for about \$550.

AirHood PORTABLE RANGE HOOD theairhood.com

AirHood's dual-filter technology removes grease, smoke and cooking odors as they happen.

The device's charcoal filter purifies: A strong ventilator draws in cooking fumes and passes them through an activated charcoal filter that lasts for months. Spares are included.

An oil filter extracts grease particles caused by steam from cooking. This also reduces odors and prevents a yellow, sticky film from building on surfaces.

There is also a wireless option, with a battery life of up to 180 minutes.

AirHood will retail for \$129; shipping to crowdfunding backers is set for October.



Kiko LASER DATA MEASURER OF KIDS' HEALTH heykiko.com

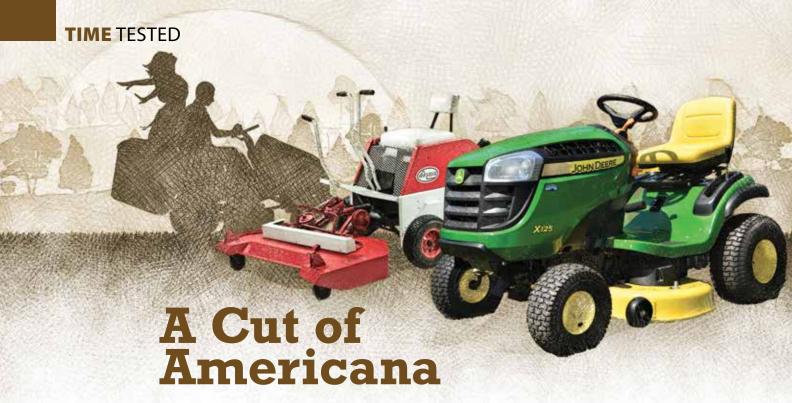
Kiko is a kind of personal, portable health clinic that measures kids' height and more.

To measure height: Place the Kiko Height Measurer on the floor. Measure the height of the ceiling for the initial setting. Place the compact Kiko device on the child's head and press the button. This will automatically subtract the measured values from the initial setting to display the child's height. One initial setting is sufficient.

The complete clinic set includes a body composition scale, which sends microcurrents throughout the body with four safely designed electrodes. The scale measures body weight, BMI, body fat, muscle mass, water, protein, visceral fat, metabolism and bone mass.

With a planned fall delivery, the full Kiko clinic will retail for \$199.





CELEBRATING ITS 100TH ANNIVERSARY IN THE U.S., THE RIDING MOWER HAS A LITTLE-DOCUMENTED HISTORY

BY REID CREAGER

OOR RONALD. In the closing minutes of the 1987 movie "Can't Buy Me Love," he's doing his teen job thing riding a lawn mower through a tony suburban neighborhood when the stereotypical blonde love of his young life emerges to say hello—before getting into a convertible with her unrealistically attractive friends.

But this is not the final cut. As our everyman protagonist (Patrick Dempsey) begins to putter away, head down, Cindy (Amanda Peterson) suddenly re-appears. She gets on the riding mower directly behind him, and the two talk and laugh and finally kiss as they wind into a fiery orange sunset.

The merciful ending to this yawning nerdgets-cheerleader quasi-comedy, which grossed \$31 million (now that's gross), does represent a snippet of Americana.

From the posh expanses of southern California to the endless, flat midwestern plains to the Jersey Shore—and on thousands of golf courses and farms in between—a person on a riding mower in the summer heat is as common as a bad teen flick.

Let's see how we arrived there.

DON'T TRY THIS AT HOME, KIDS

Lawn mower racing is an officially recognized sport, if that's your bag.

There is actually such a thing as the United States Lawn Mower Racing Association and the Lawn Mower Racing Hall of Fame.

According to Guinness World Records, the fastest lawn mower speed of 143.193 mph was achieved by Antony Edwards (UK) at Elvington Airfield, York, Aug. 22, 2021.



A quiet history

Edwin Budding of Gloucestershire, England, is largely credited with inventing the first lawn mower (and sometimes incorrectly credited with inventing the first riding mower). He was granted a British patent on Aug. 31, 1830.

Like many inventions, Budding's was technically an innovation because it came from an earlier, original concept.

According to Made Up in Britain, he noticed a machine in a cloth mill that used a cutting cylinder mounted on a bench with a bladed reel to trim the irregular nap from the surface of woolen and velvet cloth. This gave it a smooth finish. His reel-type mower was mainly used to cut grass on sports grounds and larger gardens.

The origin of the first self-propelled, riding lawn mower is not widely documented.

GreenPal is one of the sources that say the now-defunct Ideal Power Lawn Mower Co. of Lansing, Michigan, introduced the world's first such model in 1922. Ideal was founded in 1907 as a consolidation of the Air-Cooled Motor Co. and Ideal Motor Co.

According to GreenPal's May 2022 blog, "The Evolution of the Lawn Mower," the riding mower was called the Triplex.

Similarly, the individual who was arguably the strongest driving force (pun intended) behind the riding lawn mower is not a household name. In fact, his middle name is often misspelled on websites that discuss lawnmower history, with some sites even erroneously crediting someone else.

According to Max Boothe Swisher's 2015 obituary, this resident of Warrensburg, Missouri, developed and patented the first riding mower that had "zero turning radius" (i.e., able to turn into a circle).

Not only did Swisher conceive of the idea and coin the phrase, "Both his zero-turn



U.S. Patent No. 2,582,177, granted on Jan. 8, 1952, to Max B Swisher and Guy L Boothe, is titled "Powered caster wheel for vehicles."

The Abstract describes "new and useful improvements in power driven (sic) lawn mowers and other vehicles and more particularly to a device of this character having a single combined powered caster wheel for steering and propelling the vehicle." Corresponding images show how the invention facilitates steering before it was also incorporated into a riding mower.

mowers were first to market and decades before their concepts became the industry standard with all major mower manufacturers now offering versions of the concept. Today, the 'Zero-Turning-Radius' term is used throughout the entire mower industry and represents a major category in total mower sales."

IronSolutions.com says Swisher's invention, called "The Ride King," was the first commercially available zero-turn mower and

manufactured in 1955. "It used the front wheel as the drive wheel that was also able to turn 360 degrees. The wheel was driven by the motor in the same direction and, in order to reverse or utilize the zero-turn radius capabilities, you turned the steering wheel 180 degrees and the mower would move in reverse."



The now-defunct Ideal Power Lawn Mower Co. of Lansing, Michigan, reportedly introduced the world's first self-propelled, riding lawn mower in 1922.

TIME TESTED

(Some sources say someone named Max Roper invented the zero-turn riding mower

in 1949. But they say he was from Warrensburg, Missouri—the same hometown as Swisher—making this claim suspect. Also, we could not find any patents connected to him and mowers.

Roper Co. was a manufacturer of lawn and garden equipment in the United States in the second half of the 1900s.)

John Deere has been a dominant riding mower brand for decades.

Deere, John

The riding mower became more than a rare luxury in the 1960s.

In 1963, a Hesston Corp. employee, John Reiger, patented full zero-turn radius technology. There was no steering wheel; the mower turned on a zero-degree radius by utilizing two independent drive levers.

That same year, John Deere entered the lawn tractor market on its way to becoming the most recognized lawn tractor brand in the United States—a distinction the company has held for a half-century. Deere & Co. is easily the largest farm equipment company in the world. Last year, Consumer Reports ranked the Deere S240-48 the best riding mower and tractor.

John Deere's debut model, the 110, had a 4-stroke, petrol-fueled engine with 7 horsepower that was very advanced for its time because it had features shared by bigger farming tractors. Deere quickly capitalized on that popularity with its model 60, designed for people who had less land.

Deere has been mowing down the competition ever since. Even if Ronald and Cindy drove away on a Snapper. •

INVENTOR ARCHIVES: JUNE

June 7, 1886: Henri Marie Coandă, a Romanian inventor who is part of a debate over who invented the jet engine, was born.

Most historians credit British engineer Sir Frank White or German aerospace engineer Hans von Ohain with inventing the jet engine; both did so independently.

Coanda's claim is not as publicized. What is not in dispute is his being the namesake for the Coandă Effect—the ability of a fluid jet to stay attached to a convex surface.

Coandă described it as "the tendency of a jet of fluid emerging from an orifice to follow an adjacent flat or curved surface and to entrain fluid from the surroundings so that a region of lower pressure develops."

This principle gives jet fluid a constant flow while at high speeds, an essential factor in jet flight.

According to the blog "History of Yesterday," Coandă invented the original model for the jet engine in 1910; Whittle (1921) and von Ohain (1944)

Many historians say the Coandă-1910, powered by a ducted fan, never flew or was even tested because it was incapable of flight. There is no documentation of his jet ever flying.

innovated significant improvements.

A 1987 book, "Technology and Technical Sciences in History," written by academics

Rolf Sonnemann and Klaus Krug from the University of Technology of Dresden, say the Coandă-1910 was the first jet plane. But few if any other known, reputable sources make this statement.

In the 1930s, Coandă used the Coandă Effect as the premise for the design of a flying saucer-shaped aircraft that used an unspecified source of high-pressure gases to flow through a ring-shaped vent system. He applied for a patent for his design in 1936, but no model was built.

He also invented a decorative material for use in construction, beton-bois, which is prominent on the interior walls of the spectacular Palace of Culture in lasi, Romania.



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The Roads **Less Traveled**

WHETHER YOU SEEK A PATENT OR NOT, CONSIDER THESE 8 MAIN WAYS TO PROFIT FROM YOUR INVENTIONS BY JACK LANDER

VERTHE YEARS, my *Inventors Digest* articles have stressed two basic choices for profiting from our inventions: license your patent, or produce it.

But as far as I can remember, I have never written in one column about all the main ways within these choices to profit from inventions.

In my experience, most uninitiated inventors begin their venture with little or no idea how to proceed. Worse, they grab the first of the two basic choices above and head for a patent attorney.

At some point, it is usually important to investigate your chances of getting a patent. Even if we decide to produce without a patent, we will need to determine if our invention is already patented and whether the patent is currently enforceable.

But the decision to file a patent application should not be assumed as the best first step. Reviewing the eight options below before spending money may save money and alert the inventor to possibilities that better fit with his or her purse and personality.

Even the seasoned inventor may benefit from a review of the eight options within these two main license/produce choices. Let's examine them in more detail.

File for a patent, and license to a single licensee. Few inventors have the luxury of fulltime inventing. We work at other occupations and invent when we can find the time. Therefore, filing for a patent and licensing to a single licensee is usually the most practical option, and it appears to be the most popular.

But Option 1 is based on two assumptions: Our patent search and patentability opinion suggests we will obtain a utility patent if we file; and we have access to the \$10,000 plus that a utility patent usually will cost.

Also, consider that filing is a gamble. The odds of final rejection of your essential claims (the claims that make your invention beneficial and commercially superior to what is already in use) are about 50/50. Nearly half of patents filed fail to issue, for a number of reasons.

File for a patent, and license to multiple **Licensees.** This is the dream of many inventors, but few inventions are sufficiently profitable that they can attract more than one licensee.

If you invent an automobile accessory that is understood prior to use to be a winner, such as Robert Kearns' intermittent windshield wiper, all of the producers in the field will want to license your patent. Good luck.

File for a patent, and produce and market **on your own.** The main obstacle for this option is limited access to capital. If it issues, the patent probably will have cost you between \$10,000 and \$15,000. Add to this the cost of a facility for manufacturing and specialized tooling such as plastic injection molds.

A budget of at least \$100,000 is not unrealistic, and possibly much more.

If you are not experienced in the various manufacturing methods that are needed to produce your invention, consult with a manufacturing specialist who can recommend the best processes and the kinds of special tooling needed to accommodate those processes. Even if you intend to purchase components from job shops, you will be charged for any special tooling such as plastic injection molds, stamping die sets, and automation programming.

4 File for a patent and produce, but delegate marketing. All the advice for Option 3 applies here. But delegating marketing usually involves one more person who will take a chunk of the total marketing cost.

For example, if your invention is one that should sell well in catalogs and on the internet, you can work with a catalog agent who will place your product in the appropriate catalogs and on their internet market channels, and keep both you and them happy. But this service means your marketing costs go up—typically around 10 percent or a bit more. This expense may be repaid by permitting you time to manage all other aspects of your business more efficiently.

5 Bypass patenting, and license or sell your upfront valuables outright. Suppose your patent does not issue because the patent examiner concludes that your claimed features are not sufficiently novel. You've probably invested a lot more than just your patent expense by the time you receive your final rejection. And you have spent time planning its eventual manufacturing and marketing.

If you have "proof" that the market will respond to your product, you have several valuables you can sell or license. (See my column in the March 2022 issue.)

First, you have a new product that you are sure will sell and your prospect will be first in the market, which in some cases is just as valuable as a patent.

You can't offer absolute proof of profitable sales until your product is selling, but a professional survey and opinion by SurveyMonkey, for example, will count for much more than an unsubstantiated opinion. And if your sell sheet has elicited encouraging responses from potential sellers, it also is an indicator of a market, as well as the value of the sell sheet itself.

A clever brand name may be valuable, as is a manufacturing plan. And your availability as a consultant is a valuable.

Inventors seldom think about abandoning their inventions until they have paid for a patent search and perhaps made a prototype.



You can't sell blue sky, but a well-prepared market entry plan for an attractive new product has substance that a small manufacturer may welcome and pay for.

Bypass patenting, and produce and market on your own. If your patentability opinion suggests that prior art precludes you from getting a patent, or your cash resources are slim and your budget won't support patenting and producing, then producing and marketing on your own may be a good option.

The costliest expense of even a small venture often is that of special tooling, such as a plastic injection mold. Molds may cost as much as \$100,000 for certain parts, and financing is seldom available because the finished mold is of no value whatsoever to anyone other than the producer.

So, if your invention can be produced on machines that require relatively inexpensive

programming, your limited budget may be adequate.

Bypass patenting and produce, but delegate marketing. All the thinking for Option 6 applies here. The main difference is that you will concentrate on economic production, and engage a manufacturer's representative to line up and manage the distribution. As I pointed out in Option 4, much or all of the added expense may come back to you due to your focus on the other demands of your business.

Abandon further efforts early on, and profit from the expenses saved. Of all the roads to invention success, this is the road least traveled.

Inventors seldom think about abandoning their inventions until they have paid for a patent search and perhaps made a prototype. We are enamored with creative and novel devices, which often cloud our ability to see the more





practical side of inventing: Will it sell? Is my invention truly superior to what is already serving the need or want, or is it just another means of accomplishing it? Do the millions of home and business offices really need another paper clip, even though yours may be very novel?

One way to help guard against a fatal obsession is to create your sell sheet as the next step after defining your invention on paper. Your sell sheet must convince you, your friends, and especially total strangers that your invention's benefits to the user are superior to what is presently filling the need.

If the score isn't at least four stars out of five, you should consider saving the investment of time and money for your next invention.

One of the simple judgment steps you can take without spending a dime is to search Amazon.com to determine if items already exist that accomplish what your invention would.

Be prepared for a shock. You may discover that several items fill the need, and your invention would be an uninspiring "me, too."

Another step is to learn to do your own patent search. You may find prior art that is exactly like yours. Beware of "false negatives"—search opinions that suggest there is nothing like yours in the patent files.

If you are an inventor with lots of ideas and an average purse, don't waste money on longshots. Learn to be your own best critic.

In the issues ahead, I will address these eight practical ways to profit from your inventions in greater detail.

In closing, I must credit Robert Frost for my inspiration in writing this column. Here are the last three lines of his poem, "The Road Not Taken."

Two roads diverged in a wood, and I— I took the one less traveled by, And that has made all the difference.

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







PART 2

13 More Posting Ideas

WAYS TO BE CREATIVE, ENGAGING AND PERSONAL IN CONNECTION WITH YOUR INVENTION BY ELIZABETH BREEDLOVE

Part 2 of a multi-part series providing ideas for content on social media platforms.

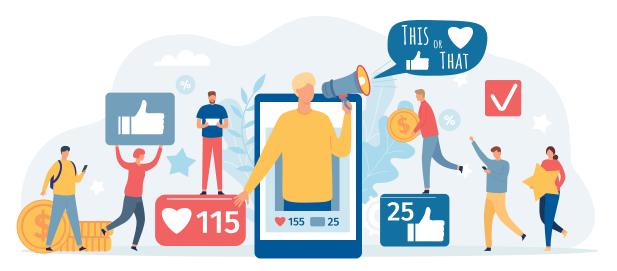
AST MONTH, I gave you 13 content ideas for when you create a social media content calendar and have no idea about what to post related to your invention.

If you're still struggling to come up with new content, here are 13 more new ideas for creating captivating social media content that will help you grow your online presence and, ultimately, your business.

- **Cross-post other content.** Your content should be distinctive, but it doesn't necessarily have to be original. Look at what other content you or your marketing team have posted or published recently to get inspired. Consider posting a link to it, reposting something from elsewhere, or even turning a blog post into a series of social media posts.
- **Jump on trending topics.** Pay attention to what is trending on social media. Is there something everyone is discussing, or perhaps a style of video that is trending? Jump on these trends, but put your own spin on it to make it interesting and relevant to your brand. If you have a fun or youthful brand, TikTok is a great place to begin. Find the trending videos, then use them as inspiration to make your own remix.
- Create branded, shareable graphics. Have something simple to share? Don't just post about it; create a graphic! Images are often more likely to be shared than text, so graphics are an easy way to publish content that others

are more likely to share—as long as the information the graphic contains is also interesting and shareable.

- **Share product photos.** What better way to show off your products, especially newer ones, than with product photos? In the caption you can provide more detail about the product, discuss use cases, or encourage people to visit your website to purchase a product from you.
- Ask "This or that?" questions. If you need social media engagement to boost your profiles, consider asking a simple question for your followers to answer. For example: pizza or tacos? Make it easy for people to leave a comment with their answer. Try to make questions like these relevant to your product. If you've invented a product related to camping or a campfire, you could post something like "Roast weenies or roast s'mores? Tell us in the comments!" along with an image of a campfire.
- Provide a product walkthrough. This is a great example of longer form content that's ideal for a video format. Film yourself showing off your product and walking through how it works and how to use it, then post your video to Facebook, YouTube, Instagram or TikTok. Include a call to action to make the most of this content. Invite viewers to leave a question in the comments for you to answer, or send them to your website to purchase the product.
- **This** Compare your different products. This is an especially useful idea if you have a large product catalog, or several models of the same product. Create a post on the pros,



Put your own spin on current trends. Create shareable graphics. Ask "This or that?" questions.

cons, similarities and differences between your products. Provide all the information your followers may need to decide which product(s) or model(s) to purchase. You can likely stretch this content into a series of multiple posts.

Show how simple your product is to use. Many products solve a problem by being easy to use. If this describes your invention, create a video highlighting it, then post it to social media with a caption describing how it can simplify an aspect of someone's life.

Share a positive review. Do you collect customer testimonials and reviews? Take the time to share these on social media and thank the person for his or her kind words. This is an effective approach for two reasons. First, it provides valuable social proof to those who may be considering purchasing your product. Second, it shows appreciation toward your satisfied customers who are willing to share how much they love what you've created.

Post before-and-after photos involving your product. Nearly everyone can appreciate a satisfying before-and-after. It's why we have a whole television network that is almost entirely devoted to home renovations and remodels. If you have photos demonstrating how your product can make something better or easier than before, share them on social media.

Spotlight a vendor with whom you work. This type of content can be a fun, interesting way to tell more of your and your product's story, especially if you are an American using something manufactured in the United States or that has an interesting story. People love to know where the products they use come from, how they were invented, and who came together to make them happen.

Feature a team member or employee**generated content.** Do you ever show off your team on your social channels? Posts like these are the perfect way to give your audience a more intimate look at your company while showing your employees how much you appreciate them.

Tell your employees' stories. On that note, you can take employee spotlights a bit further. Consider creating a long-form video about them, or even writing a long post to go along with a picture of them. Talk about how they came to work with you, what they love about your company and product, and anything else you think your audience would identify with whether it's personally or professionally.

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.



Scoping Out a Better Way

FRENCHMAN'S PORTABLE OBSERVATION STATIONS DESIGNED TO IMPROVE THE ASTRONOMY EXPERIENCE BY JEREMY LOSAW

YRIL DUPUY believes the literally otherworldly views enjoyed by astronomers ■ should not be limited by the visual reach of a telescope. So he is figuratively reaching for the stars.

The native Frenchman is an avid astronomer and inventor who understands the limitations of traditional scopes: heavy, hard to focus and affected by light pollution. He is founder and CEO of a company called Vaonis, which develops portable observatories to give astronomy buffs a tool worthy of their passion.

Stellina is the flagship of Vaonis's line of portable observation stations. It combines the utility of a telescope with a high-end digital camera so that users can observe astronomical formations, as well as photograph them. The device moves automatically to track a desired stellar object and even compensates for the Earth's rotation to accurately hone in on the subject.

Unlike traditional telescopes, Stellina features an autofocus functionality that makes it easy for the user to view and create sharp images. The built-in light pollution filter ensures that it can be used in urban environments where astronomy can be difficult.

The device is controlled by an app called Singularity, which helps

users find the stel-



Stellina combines the utility of a telescope with a high-end digital camera so that users can observe astronomical formations, as well as photograph them. "Because I used the classical telescope a lot ... I saw that it was not a good instrument to learn astronomy."—CYRIL DUPUY

looking for and even offers suggestions based on the current location of the device. The app facilitates high-end astral photography and can stack images to yield vibrant, galleryworthy images.

Exploration, not equipment

Dupuy has been an amateur astronomer since 15; he studied aerospace engineering at the University of Montpellier.

From his many nights of stellar observation, he understood the issues with traditional telescopes and was inspired by what products like GoPro were doing for amateur filmmakers.

"I used so many different kinds of instruments, and it was always the same pain to get a result," he said. "It's long to install. It's very bulky, heavy and very difficult to use.

"Because I used the classical telescope a lot ... I saw that it was not a good instrument to learn astronomy. So at this moment, I had the idea to create something much easier to use."

Dupuy set out to create a device that would allow people to focus on exploration-not equipment.

Developing the product that became Stellina was difficult. It melded optics, electronics and an app to be able to hunt cosmic formations.

Initially, Dupuy considered creating a retrofit product for existing telescopes. However, that concept was quickly scrapped because there was too much variation in telescope design for universality without undue design effort. This led him to create a standalone telescope so he could control the whole ecosystem.

The biggest challenge in the development was the imaging. Stellina is essentially a highpowered digital camera.



"The most difficult part in the telescope we wanted to create is about the image processing, because all of the rest of the instruments already exist," he said. "We are alone in the world that can do a total automated image processing from the first picture to the final image you can see on your iPad."

Dupuy hired a former Sony employee who had experience in image processing. They used a Sony sensor in the product, which helped unlock the functionality they sought.

Testing was a key part of the development: Dupuy and the team had to go out into the field at night to use it, because there is no way to simulate the night sky in the lab. Eventually, they added a testing site in Chile so the Europeanbased team could work during their day while South America was experiencing night.

Success adds to product line

Stellina was launched at the 2018 Consumer Electronics Show, where it was awarded Innovation Honoree in the Digital Imaging category.

The product was offered for sale later that year. The Metropolitan Museum of Art in New York City selected Stellina for its store during NYCxDesign.

INVENTOR **SPOTLIGHT**

Dupuy was unsure how the premium price—at that time around \$3,000 per unit—would resonate with consumers, but he was pleased by how quickly Stellina was embraced.

He has filed for a number of patents, with some issued and others pending. He said it was difficult in the early stages of his company to prioritize intellectual property; it was expensive to file and took valuable resources from development. However, he was able to protect his image processing algorithm and other aspects of the device.

His current IP strategy is to create a defensive wall around the innovation that is resident in his products, because he has no plans to build a valuation to sell the company.

Much of the manufacturing for Stellina is done in Europe. Although the electronics—including the embedded computer and sensors—are made in Asia, many of the other internal parts are made in the European Union. The final assembly is done in Europe as well.

Because Dupuy is manufacturing a highperformance product, he wants to have the manufacturing nearby so he could keep close tabs on the process. Stellina's success drove him to add to the product line. He created an entry-level version of the product called Vespera that launched on Kickstarter in 2020, raising over \$2.5 million. He also created a high-end telescope dubbed Hyperia, a high-performance device for serious astronomers.

As his company grows, Dupuy's focus is in two areas. He is working to increase his production capacity so he can fulfill more orders faster.

He also wants to make significant improvements to the app, to make it more powerful and easier to use. Because the app is used across all three devices, those gains help the whole product line.

Finally, Dupuy is working on a new, undisclosed product that he hopes to launch within the next two years. \odot

Details: vaonis.com

Jeremy Losaw is a freelance writer and engineering manager for Enventys. He was the 1994 Searles Middle School Geography Bee Champion. He blogs at blog. edisonnation.com/category/prototyping/.



Stellina's success drove Cyril Dupuy to add to the product line. He created an entry-level version called Vespera that launched on Kickstarter in 2020, raising over \$2.5 million.





HOW WE DO IT







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Engineering & Prototyping



Manufacturing



Sourcing



Market Research



Crowdfunding (Kickstarter)



Digital Advertising & Marketing



Social Media Marketing



Public Relations

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



Gliding in the Grass

WOMAN'S HIGH HEEL ATTACHMENT STRIPS ELIMINATE THAT SINKING FEELING OUTDOORS BY EDITH G. TOLCHIN

■ VEN AS a young woman, I was not able to master the art of walking in high heels. I gazed longingly at my gal pals who rocked the stilettos with ease, but I never wanted to look like an oaf, tripping while on a date in the 1980s.

Nowadays, however, according to statista. com, "The value of ... (the high heels, aka "stilettos") market was expected to rise to 42.7 billion U.S. dollars by 2024."

Stilettos ain't goin' nowhere! And now, with wedding season upon us, Grasswalkers,® invented by Sheryl White of San Diego, are a great way to rock those heels in an outdoor setting.

Edith G. Tolchin (EGT): Where are you from, and have you ever invented anything before **Grasswalkers?**

Sheryl White (SW): I was born and raised in San Diego, had a 28-year career in banking, and was a founding board member of Torrey Pines Bank. While in banking, I always had many clients I looked up to for starting their own businesses and wanted to do the same one day. I have never invented anything prior to Grasswalkers.

EGT: How did the idea for Grasswalkers come about? How do they work?

SW: I went to a friend's wedding that was held on a beautiful lawn at a hotel in San Diego. All of the women were dressed in heels, including me. As we walked on the grass our heels would sink—not only twisting some ankles but ruining some beautiful shoes! There were also some older ladies who had to wait outside the grass area on the concrete because they didn't want to chance the risk of an injury.

I got home and researched products that were out there to solve this problem. I could only find products that fit over the heels of the shoe (like little caps), so I ordered several different kinds. Most of them that I tried were hard to place on the heel because the size of the heel didn't quite fit into the cap.

When I was finally successful, it didn't increase the circumference of the heel enough to stop the heels from sinking in the grass. In fact, in my first attempt with "Soulmates," I had sunk in the grass immediately and the "cap" stayed buried in the dirt.

I decided to attempt making a product myself, because I had just received my master's degree in leadership at USD and I was motivated by the students in my cohort who were all inventing new businesses. I also thought, "How hard could it be?"

The product I came up with (in 2012) is so simple. You just attach a flexible plastic strip to the bottom of the shoe from the toe to the heel, making it a completely stable surface to walk on and start walking. You don't have to worry about the size of your heels not fitting, because the bottom surface of the toe and heel are the only surfaces that touch the product.

"I had to go through many prototypes before I finally discovered the proper material, flexibility, and size that work -a total of eight prototypes."—SHERYL WHITE





EGT: How many tries did it take before you had a viable prototype?

SW: I had to go through many prototypes before I finally discovered the proper material, flexibility, and size that work—a total of eight prototypes.

I started by bringing several drawn shapes to a plastics company in town for them to die-cut the shapes out for me. I literally taped these different shapes onto my heels and walked out on the grass to see which shape would work the best and look the best.

It actually took me a couple of years to whittle down the size that would finally work and be saleable.

I recall one of the earlier shapes I tried and handed out at a cocktail party; the journalist covering the event called them "snowshoes for heels." I knew that would never work and got back to making them smaller and more flexible. I also was advised by a friend to change to a mold instead of die-cut plastic.

About three years ago, I decided I needed to improve on the product's life span. I didn't want to be accused of not caring for the planet's trash problem when it comes to non-reusable plastic. The plastic we use now is recyclable, and when the adhesive wears out on the product, we now sell "Replacement Adhesive Pads" for a small cost that will make the Grasswalkers like new.

We are hoping that individuals using them will keep buying the pads to reuse their Grasswalkers. Currently, about 80 percent of our clients buy these replacement pads with their first order.

EGT: What are Grasswalkers made from? Fabrics and components? How is the product packaged?

SW: It's made from recyclable flexible polycarbonate with adhesive and non-skid tape. It is packaged in a recyclable paper envelope, and the product can be re-used.

EGT: Where is the product manufactured? If overseas, have you had problems with logistics or quality control?

SW: Every part of the product, including the packaging, is manufactured in San Diego.

When I started, the company I hired to do the mold was in Carson City, Nevada. Even having it there, which wasn't that far from where I live in San Diego, was not convenient for meetings. So, I found a company in Carlsbad. I never looked at manufacturing in China or anywhere else, because I really wanted this product to be 100 percent "Made in the USA!"

EGT: Can you share info about your patent process?

SW: We have trademarks in the United States, Canada and Mexico.

We have a patent in Australia that was given in October 2015.

We have tried to get a patent in the United States and, after much time and money, were turned Grasswalkers is a flexible plastic strip attached to the bottom of a highheeled shoe from the toe to the heel, enabling more secure walking on unstable surfaces.

INVENTOR **SPOTLIGHT**

down because there is a product the USPTO feels is similar. However, that product is not for high heels; it is for men's flat shoes. To me, there is no comparison with the look or how it works.

EGT: Have you tried crowdfunding or TV shows such as "Shark Tank"?

SW: No. I did meet with Lori Greiner privately, and she said she thought the product was too much of a niche product for her. I have not pursued crowdfunding or "Shark Tank" because I want to retain sole ownership and I have enough funds to continue to pay for the expenses. It would, however, be nice to have some marketing advice.

EGT: Have you had any obstacles in any of the phases of product development?

SW: The biggest obstacle has been the patent process and dealing with attorneys.

EGT: Will you be adding any items to your product line?

SW: In 2019, we added "Replacement Adhesive Pads" to our site because we didn't want this product to be thrown away and contribute to the "plastic problem." Now, for the small price of \$3.50, customers can keep the Grasswalkers strips, making them like new. I also have another item I am thinking about, also for heel wearers.

EGT: Any advice for inventors seeking to develop a fashion item?

SW: It takes much more time and money than you think. But if you think of something that hasn't been done before or you believe you can greatly improve upon an interesting idea, don't wait for someone else to make it. Just go for it, no matter what. It is very rewarding. €

Details: grasswalkers.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).





PRODUCT DISCOVERY

Most products fail because inventors don't do the work at the "fuzzy end" of the product development process. In other words, they rush to make prototypes and even manufacture their products without knowing what is out there and what customers really need.

Our Product Discovery process helps reduce the risk of failure by validating your idea with real customers before you invest substantial time or money.

WITH PRODUCT DISCOVERY, YOU GET:

- Up to 4 hours of consultations and brainstorming with our internationally recognized New Product Development Professional-certified experts, also trained in marketing
- Prior art and competition analysis from our market research specialists
- Product sketches for a pre-CAD visual representation





ERE'S HOW CRAZY this bobbleheads thing is, more than 250 years after their invention: The Los Angeles Angels have made bobblehead promotions involving their superstar DH/pitcher Shohei Ohtani as ubiquitous as a hopeful actor waiting tables in Hollywood.

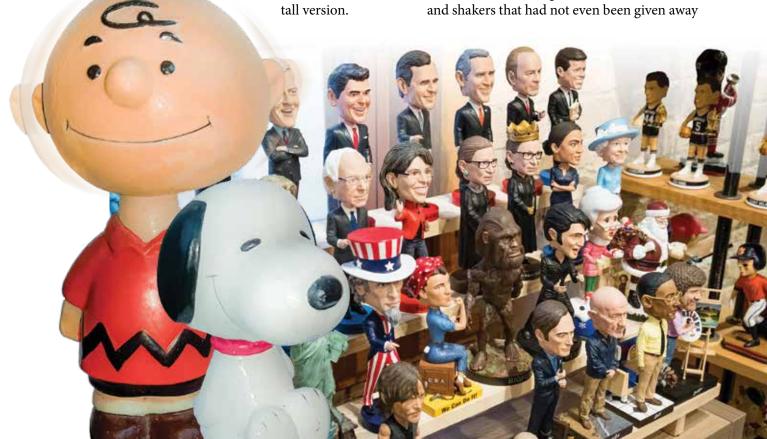
An eBay search of "Ohtani bobblehead" on May 7 this year showed 306 entries. The highest price sought was \$1499.99, for

a limited-edition, 3-foot-

Oh, and:

- An Ohtani Pitching Knucklehead Big Head Bobblehead, at \$349.99? Nod yes.
- An Ohtani Rookie King Memorial Bobblehead, at \$389.54? Nod yes.
- An Ohtani-Wan Kenobi Star Wars Bobblehead, at \$54.88? Nod yes.
- An Ohtani MVP Bobblehead, at \$49.99? Nod yes.

The latter two listings were for Ohtani movers and shakers that had not even been given away



yet at Angels home games on May 27 and May 10, respectively. These were listed as pre-sales.

The Angels don't have to worry much about these pre-sales cutting into attendance revenues. An Ohtani bobblehead giveaway (free to the first 25,000 paying customers) on April 8 attracted a near-capacity crowd of 42,719.

Not bad for a team that's often out of playoff contention by Father's Day.

A bow to the queen

Is there a specific date or year that can be attributed to the invention of the bobblehead? Nod no. But it's fitting that the colorful history of the "nodder" or "wobbler" or "wacky wobbler" includes none other than Oueen Charlotte as one of the first bobblehead collectors.

The "Dictionary of Toys and Games in American Popular Culture" reports that the figurines originated in the 1600s, when Buddha and other "temple nodders" were produced in Asia. But the book provides no further detail.

The National Bobblehead Hall of Fame and Museum says the first known noddinghead figures were documented in Europe and China during the 1760s. The British royal family collected the plaster figurines throughout the 1800s, according to The Smithsonian; in fact, Johann Zoffany's 1765 portrait of Queen Charlotte in her dressing room at Buckingham Palace shows two tall Chinese nodders behind her at either side of her head.

Today's more cartoonish bobbleheads usually anchored by a disproportionally large head with a spring inside that triggers the bouncy movement—were born in 1960.

Those papier-mâché figurines were both generic and player specific, debuting with bobbleheads of Willie Mays, Roberto Clemente, Mickey Mantle and Roger Maris. Major League Baseball created and sold them to celebrate the 1960 World Series, in which Clemente, Mantle and Maris played.

America's exploding love affair with the automobile helped drive bobblemania in modern culture. And almost exactly 200



Bobblehead Museum tour

youtube.com/watch?v=7oiDmWmOYhA



The centuries-ago origins of the bobblehead precludes the existence of any patents associated with the original figurines themselves. Nonetheless, we found some interesting nodder-related U.S. patents:

No. 6.810.611B2—Bobblehead photograph frame, published in 2002

No. 7,048,605B2—Bobblehead shaker, published in 2003

No. 8,858,294B2-

Autonomous bobblehead toy, published in 2011





years after the painting of Queen Charlotte at Buckingham Palace revealed the first documented nodders, four moptops from Liverpool were front and center.

In an attempt to cash in on the first year of Beatlemania in 1964, Car Mascots produced a bobblehead Beatles set that was meant to spring around on dashboards or up against car rear windows. The set remains a collector favorite (even though none of the individually identified Beatles looks like his namesake).

A decent-condition set sold in April on eBay for \$450, with the seller claiming at least twice that value if one of Ringo Starr's drumsticks hadn't been missing.

Say Hey!

By the mid-Sixties, there were nodders representing most, if not all Major League Baseball and National Football League teams. Was the bobblehead craze now a steadily growing phenomenon? Nod no.

Head Strong

Late-night talk show host Conan O'Brien is ... interesting looking. And he's not afraid to have fun with it.

When his show visited Chicago 10 years ago this month, O'Brien surprised the audience by saying he was giving the city a departing gift: a giant bobblehead of himself. It was more than 17 feet tall and weighed 2,000 lbs.

Workers at the show used a crane to deliver the bobblehead to the Art Institute of Chicago—where its officials quickly

requested, on camera, that the human carrot head be taken away.

Turns out, O'Brien and the show neglected to ask permission first.

The nodder eventually landed at Harold's Chicken Shack, store No. 62 on Wabash Avenue, where it displays the daily specials.

"And that's where it stays until the cops make us move it," O'Brien said.

Because of their ceramic or papier-mâché construction, these little souvenirs were a big pain to make and ship. For the next 30-plus years, bobbleheads were a cult curiosity at collector shows but little more.

Eventually, someone got the idea to make bobbleheads from plastic. Suddenly, they became as popular as, well, Willie Mays.

More than one source says that a Mays bobblehead given to 20,000 San Francisco Giants fans at a May 9, 1999, game ended the nodder's inertia. "We knew we had something special," former Giants marketing employee Mario Alioto told the Santa Rosa Press-Democrat.

(Mays wasn't so sure. He said the bobblehead didn't look anything like him. It didn't. Doesn't matter.)

In the past couple decades, we have seen nodders that run the gamut from Ernie Harwell to John Gotti to William Shatner to Yoda to Nikita Khrushchev to Clint Eastwood to "Game of Thrones" to Blake Shelton to Ketanji Brown Jackson. All major sports are represented, from players to announcers to team organists.

Many of the more recent nodders were made in limited quantities, although scarcity is not always synonymous with demand. On the other hand, occasionally someone will pay \$750 for a bobblehead of the former owner of the Minnesota Twins (Carl Pohlad), as recently shown on eBay.

Almost all these newer bobbleheads—often made of polyresin that allows more detail in facial features—are a departure from the simple, round-faced, cartoonish innocence of the 1960s nodders. In general, the age, fragility and rarity of the vintage bobbles make them more valuable, especially those with a square base.

The National Bobblehead Hall of Fame and Museum celebrated its first National Bobblehead Day on Jan. 7, 2015. The website does not say why the hall chose January 7. Then again, it also doesn't say why America is all boingy-boingy over a big toy head on a spring. €

10 Big Yeses

In February, New York-area sportswriter Pat Pickens compiled a list of the 30 most valuable bobbleheads of all time for Work+Money. The top 10:

- 1. 1961 New York Yankees bobblehead, \$59,750: Apparently one of just two in existence in a larger size (14 inches tall), the mint-condition nodder sold through Heritage Auctions in 2020.
- 2. 1800s plaster Chinese figurines, \$35,925: Also oversized at 15.75 inches, they were laid on simulated marble wood bases. Sold in May 2010.
- 3. 1960s Green Bay Packers nodder, \$34,557: Gem condition, sold in 2015.
- 4. 1960s San Francisco 49ers promo, **\$19,684:** Said to be in "super-gem" condition, whatever that is.
- 5. 1960s Chicago Bears bobblehead, \$15,629: Near mint, and said to have garnered more than five times the original asking price on eBay.
- 6. 1960s Washington Redskins **bobblehead, \$15,125:** The seller said he found this in his parents' attic, in gem condition. Sold in 2008, the price is sure to grow now that the team's longstanding, historic nickname has been changed under pressure.
- 7. 1960s Baltimore Colts promo, \$14,300: Noticing a pattern here with NFL nodders dominating this list? This could be due to the league's popularity over baseball, and/or the rarity of the NFL bobbers. Sold in 2016.
- 8. 1960s 13-inch Los Angeles Rams bobblehead, \$12,101: Sold in January 2015.
- 9. 1960 Philadelphia Eagles promo, \$10,443: Gem condition. Auction year unknown.
- 10. Popeye the Sailor Man nodder, \$7,405: Complete in a Wacky Wobblers box (bobbleheads in their original box are worth much more), this undated gem sold in July 2011.







ID Publisher Named to IP Hall of Fame

LOUIS FOREMAN, CEO OF ENVENTYS PARTNERS, HAS LED THE LONGEST-RUNNING MAGAZINE FOR INVENTORS SINCE 2007

THE MAN who created the PBS Emmy Awardwinning TV show "Everyday Edisons" is now among exclusive company that includes the show's namesake.

Louis Foreman, the publisher of *Inventors* Digest and CEO of Enventys Partners in Charlotte, is one of the four newest inductees into the Intellectual Property Hall of Fame. The honor was announced by Intellectual Asset Management magazine on May 10.

He joins new inductees Justice Stephen Breyer, a Supreme Court justice for the past 27 years; **Pravin Anand**, a pioneer in Indian IP; and James Malackowski, a pioneer in IP transactions. They will be honored on June 13 in Chicago, Foreman's hometown.

Previous inductees (some posthumous) include Thomas Edison; Nikola Tesla; Thomas Jefferson; James Madison; former USPTO directors Andrei Iancu, Todd Dickinson and David Kappos; recently retired U.S. Federal Circuit Judge Kathleen O'Malley; Hedy Lamarr; and former U.S. Sen. Birch Bayh.

Foreman bought Inventors Digest from longtime editor/publisher Joanne Hayes-Rines in 2007, continuing the longest running magazine for inventors that dates to 1985. Inventors Digest's main mission is to inform and inspire the independent inventor.

A renowned innovator, entrepreneur and IP educator/speaker with many patents who has started more than a dozen companies, Foreman is

Foreman has many peers who are prominent in inventing and intellectual property. Some reactions:

There are two different types of successful people in this world: those who leave everyone else behind, and those who bring everyone else up with them.

"Louis has not only been successful with his own inventions and businesses but has helped countless others as well on both an individual basis and by raising up the whole inventor community."

CHARLES SAUER

PRESIDENT, MARKET INSTITUTE

How wonderful! I'm so happy for Louis.

"He has a wealth of knowledge in the IP world and is responsible for getting hundreds of inventions off the ground—truly the reason many have experienced the American Dream. Congratulations!"

LILY WINNAIL

INVENTOR, ACTRESS AND PANELIST ON THE TV SHOW "EVERYDAY EDISONS" THAT WAS CREATED BY FOREMAN



Louis Foreman (left) talks with billionaire innovators Gary Lauder (center) of venture capitalist firm Lauder Partners and Dr. Gary Michelson (right), founder of the Michelson Institute for Intellectual Property, at the 2020 IP Awareness Summit. All are strong supporters of inventors' rights.

past president of the Intellectual Property Owners Education Foundation. He has received the U.S. Chamber of Commerce's IP Champion Award.

"I am honored to join this distinguished group of innovators, educators, and IP professionals," Foreman said. "As an entrepreneur, I quickly recognized the inherent value of intellectual property as an incentive to innovate. Intellectual property has been the catalyst that enabled my companies to raise capital, hire employees, and attract customers.

"To be recognized for this as an inductee to the IP Hall of Fame is beyond words and I am humbled by the recognition."

Congratulations, Louis! This honor doubtlessly recognizes your tireless work to both help the professional class of independent inventors and inspire future innovators through work with children and teenagers.

"It is hard to think of someone who has done more to forward the cause of inventing in America over the last generation. A welldeserved honor for a genuinely good person!"

GENE QUINN

CEO AND FOUNDER OF IPWATCHDOG

Louis has represented the inventor community with style and grace for more than 25 years. As a creator, educator and entrepreneur, he brings a muchneeded perspective to IP awareness.

"Inventors Digest, a labor of love he has supported both financially and spiritually, owes its success to him and the team he has gathered to produce it. Louis' stewardship of inventions and inventors is unique; his ability to convey issues of concern to the greater intellectual property community and on Capitol Hill is without peer. Rock on, my friend."

BRUCE BERMAN

CEO OF BRODY BERMAN ASSOCIATES AND FOUNDER OF THE CENTER FOR INTELLECTUAL PROPERTY UNDERSTANDING



If Only I Knew Then

SAVE TIME AND MONEY BY HEEDING LESSONS I LEARNED THE HARD WAY AS A PRODUCT PROFESSIONAL BY APRIL MITCHELL

REMEMBER the moment I had my first "idea" like it was yesterday, as well as all the steps and processes I went through trying to get it licensed and on the market.

I had years of learning what not to do, which helped me learn what to do and get things right. I am thankful for my journey, as it has brought me to where I am today.

But there are still a few things I wish I had known starting out. There is a lot of information out there to sift through; it takes time to learn what you need to do and who you can trust in the industry.

In an effort to save you time and money, here are some of the things I wish I had known then.

Become a licensing student

When I started out, I tried to hire a company to get my product in front of other companies to get a licensing deal. Although there are some reputable companies that do this well, the company I hired did not. It was representing so many products that I felt mine was just a number.

The company did not care about my invention like I cared about it as an inventor. It did not get it in front of many companies. In fact,

after months of waiting, I was able to secure a licensing deal on my own.

I learned that it is very important to know and understand the process of licensing so I could be the one to hold the cards.

Patents are situational

Patents cost so much money, often going into five figures. I hired a lawyer right away, because that's what people told me to do—people who didn't even really know.

I spent lots of money on my first patent, and the product has never made it to market. I still have high hopes it does someday, but if not it was a lot of money spent on learning what to do and what not to do.

I am not a lawyer and am not giving patent advice, but what I have learned is that provisional patent applications (PPAs) are a great place to start.

The process gives me 12 months to see if there is interest in my concept before I file a full utility patent, if I so choose. I have also learned that some things are hard to patent and for me, not every product is worth patenting—especially if there isn't interest from companies to get the product into the market.

I have filed dozens of PPAs and only a few full utility patents. I currently hold two patents and believe they can be extremely important. I now choose which of my products are better suited to spend the money and don't file for every idea.

Understand timelines

Licensing takes time! I had no idea how long it can take to license a product.

On average, most people pitch their products from 6 to 12 months before landing a licensing deal. They can be quicker than that or take a lot longer.

Once a contract is signed, it can take 1-2 years for your product to make it to the market ... which leads me to my next point.

A deal does not mean sales

When I signed my first deal, I was as ecstatic as any first inventor would be! I assumed my product would hit the store shelves and be selling off those shelves.

I quickly learned that just because I signed a licensing contract didn't mean my product would be manufactured and sold at retail. I soon found out that the company I signed with was not as enthusiastic as I was; my product that it initially liked soon fell further down on the list of priorities.

The company didn't plan to get it out soon, so we ended the contract.

It was very unfortunate, but I did learn a lot about what to look for in a licensing contract. That helped me with my next one.

Do the math

How much money will I really make? Royalty checks can have quite the range of outcomes.

We want to think the best outcome with money, but we can easily get ahead of ourselves. It is important to know that your royalty as an inventor is based on the wholesale price, not the retail price. The wholesale price is typically at least half the amount of the retail price, or less.

The retail stores will want to at least double the money they paid for each unit, and some will even expect to triple the amount.

It is very important to discuss expected wholesale and retail prices with licensees as

well as their anticipated yearly sales, so you can understand your potential earnings.

Think long game

When I started with products, it was all about getting them licensed as quickly as I could. I needed to find the right person and fast so I could make things happen! It was all about the product and not the people.

This is where I had things wrong.

When I look back at some of my LinkedIn messages and emails, I realize I may not have come across as the most professional. Some of the messages are outright horrible and embarrassing: I just didn't know what to say or ask, and things didn't come out right.

I have since learned the importance of building relationships. Sometimes we can ask for help right away when reaching out to someone. Sometimes there needs to be a relationship built before we can ask for help, or to be pointed in the right direction or to the right person.

It is important to know that your royalty as an inventor is based on the wholesale price, not the retail price.

Don't take it personally

Like many new inventors, I used to take the rejection of my product as a rejection of me personally. Don't do this to yourself.

It's a hard road to travel when you do, and it's hard to break free from that thinking. We are in the rejection business, so we have to have the right mind-set.

So take the "no" from a company in such a way that you can go right back there to pitch a new idea in a month or two. Keep that door open, and keep showing up. The company will soon start to root for you, too! ♥

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.



Before the **Partnership**

TAKE THESE 5 STEPS BEFORE WORKING WITH A PRODUCT DEVELOPMENT FIRM BY JEREMY LOSAW

ECAUSE it takes a lot of work, time, and expertise to take a great idea and turn it into a fully manufactured product, not any one person has the knowledge to do it all.

Product development firms such as Enventys Partners in Charlotte that have brought hundreds of products to market can help inventors navigate the potential confusion and add value to the product.

It can be stressful for an inventor to share his or her product and let other people help work on it. However, with some preparation, the transition of working with an agency can be smooth and of great value. Here are five things to do before engaging with a development firm to maximize the benefit of working with those pros.

Do your research

While you, the inventor, have been immersed (and potentially obsessed) in your product and its marketplace, the development team is coming in cold.

Even if the engineers and designers have familiarity with the problem you are solving or the industry, they will need to do some research to be as familiar with it as you. Anything you can do to get them up to speed quickly will help them and you.

The best way to convey this knowledge is to document your research activities and present the development team with those documents. Explore the marketplace, understand what features your direct and indirect competitors have, and how your product is different.

Don't spend your money and their time doing elemental research that uncovers a fatal flaw or glaring issue in your strategy. Let the new team review well-thought-out research and allow their fresh eyes to find clever ways to make the product better.

Build a prototype

Because there is so much to learn from building a prototype, you should build at least one before working with a development team.

Even if you have the skill to design your own parts and have them made with 3D printers or other means, your initial prototypes need not be fancy. Simple prototypes, especially in the early stages, can be just as effective. Cutting shapes out of cardboard, or light modifications to existing commercially available products, can provide key insights for you and help inform the team.

I have even had clients come in with prototypes made from LEGOs that were used to explore the size of the product and where it would live in the home. Prototypes of any kind are immensely helpful to the design team. They can also show that some key aspects have been considered.

Create a design brief

A design brief is a document that defines all aspects of the product. It lays out the physical properties of the product such as maximum and minimum dimensions, weight, and materials it must or must not use.

The brief provides electrical characteristics such as the power (battery- or wall-powered), battery life, speed of motors, type and placement of indicators such as LEDs, and any other relevant information. It may also include function flow diagrams of how the product will be used or any logic the microcontroller needs to cover, as well as having information on the desired sales price of the product.

It can require an investment of time to bring this data together, but it will help you, the client, clarify what you really want. It will also help the new development team to see where you need help the most.



Getting it down on paper will help your team see if there are potential conflicts in the requirements, or where tradeoffs may be. Functionally, the firm you work with may be able to provide you with a document template that it likes to use, or you can make your own or download one from the web.

It is OK to leave some areas blank. Provide ranges if you are unsure about a spec, or isolate areas where you simply do not care or need help defining.

In any form, these data will be immensely useful to help convey your vision in a definitive way and decrease the chances of misinterpretation or what you want. This means a more focused development effort that will cost less and take less time.

Secure funding

Development firms do not work for free, so it will be necessary to have funding to fuel their efforts. Many firms work on a time-and-materials basis (sometimes abbreviated T&M), and they should be able to provide an estimate for the services you want.

Prices depend on how comprehensive a scope you need and how far you want the firm to take it. This may range from less than \$1,000 for simple prototypes to a quarter of a million dollars or more for a napkin sketch to production program of a connected product.

In either case, your chosen firm will help you map out cash flow burn, explain how many hours per week the team will work on your product, and provide rates for different specialties such as industrial design and engineering.

Well-capitalized inventors may not need outside funding for development; others may tap into friends and family networks for the early stages of the project. You may contact your chamber of commerce or SBIR (Small Business Innovation Research) office to see if there are funding opportunities, grants, or pitch competitions.

It also helps to contact angel investor groups or venture capital organizations, to determine whether your product is something for which they have interest. Note that different funding sources will have different terms or requirements to fulfill, and you will need to understand and be good with them before taking any outside funds.

In any case, make sure you have more funds than are estimated to cover any issues that come up, or changes that will affect the overall budget.

Optional: Get a patent

It is not requisite to come to a development firm with a patent in place, but it can help focus your team.

If you have done enough research and prototyping and have a good sense of the core technology, a provisional patent application or full utility patent can help lock in protection for your product before you hand over development to a firm.

In this case, you will not be asking the team to come up with blue-sky or new ideas—just to focus on making your patented technology market ready. Be sure to convey to your team members how reverent you want them to be to your existing patents and claims, and if you are open or wanting them to find new opportunities for additional IP or continuations. ©

Partnering with a design firm can help speed the development process and improve your original concept, making it more impactful in the marketplace.



Develop Your IP Id

HOW FAST-GROWING COMPANIES CAN IMPLEMENT AN INTELLECTUAL PROPERTY STRATEGY BY LOUIS CARBONNEAU

OST PEOPLE I speak to these days seem to know they should be doing something about intellectual property, though the level of education and understanding of how IP affects strategy runs the gamut.

People either don't understand the role of IP or if they do, they haven't really started to execute their strategy. This is usually because a myriad of competing interests will affect their bottom line or their very survival matters more than IP.

However, assuming a company survives those first brutal years, the importance of IP never fails to catch up and by then, there can be serious issues on the horizon.

First, and although we speak often about patents in this column, IP is far broader than that. It extends to trademarks (or brands/ logos), trade secrets and know-how, copyrights, contracts, etc. So, as the problem might be multifaceted, so will the solution.

Second, it should come as no surprise that a solid IP strategy is not built in a vacuum. It must be in support of and totally aligned with the overall business strategy of the company to achieve a sustainable competitive advantage.

More specifically, its goals should be:

- · Help drive profits and expand revenue opportunities;
- Minimize legal risks and dependencies toward third parties;
- Position the company as a unique provider of goods or services through an array of enforceable rights;
- Maximize the company return on investment to its shareholders;
- Boost the company valuation in view of its financing and/or exit strategy.

Put in accounting terms, the goals are to maximize assets and minimize liabilities.

Common steps involved in developing any IP strategy:

Define the organization's overall goals. The same way you don't design the same financial plan for someone just out of college compared to someone who's about to retire, there is no one-size-fits-all approach when it comes to IP. To articulate the right strategy, it is very important to first understand the company's mission; short- and long- term goals; history; product and innovation pipeline; tolerance to risks; name recognition; partnerships; financial, operational and technical strength; ability to raise capital rapidly; exit strategy and timing thereof, etc. This defines a context for planning and a timeline for executing on the strategy.

Objectively assess the internal resources.

There are three steps to this process. This starts first with an objective appraisal of the internal innovation resources. In other words, who creates IP in the company?

This step often reveals that the systematic IP capture checkpoint (if there is one) is limited to the R&D teams and undervalues the innovation potential of the rest of the employees (e.g., marketing, sales), consultants, customers, etc.

Step 2 focuses on the assessment of the IP resources and values them along a three-prong axis—relative to their legal scope, geographical range and duration. This step is often referred to as the "IP Audit," although it goes further than simply categorizing those assets by classes. A comprehensive assessment will cover:

- Patents filed and issued worldwide, defensive publications, in and outbound licenses, etc.
- Trademarks and how the branding strategy is articulated, locally and in new markets;
- Trade secrets, and how those are identified and protected;
- Copyrights, especially when it comes to software code, with a special attention to issued raised by a liberal use of open source software;

- Any challenges posed by third parties to any of the above;
- How those various categories of rights are protected and obligations made enforceable via proper contractual agreements;
- Money available/earmarked to invest in IP assets:

The third step consists of assessing the internal IP practices, which focuses on the presence (or absence) of established practices and policies that affect the creation, protection and monetization of IP assets.

These include: use of nondisclosure agreements; disclosure forms for capturing innovations, inventory and protection of trade secrets; level of IP savviness within management and employees; treatment of competitive business intelligence; sharing of information with customers/partners; guidelines regarding incoming and exiting employees, use of third party components (data, images, software—both commercial and open source); participation in standards body organizations, etc.

Evaluate the competitive market. This is about assessing short- and long-term liabilities, as well as opportunities with respect to actual and prospective competitors.

What do we know about the company's competitors? Is the company's main product or brand at risk? In which geographies? Are competitors or other players filing numerous patents? Can the company enforce its own IP assets against competitors? Can suppliers or partners present a competitive risk? Can that risk be contained? How? Is a Freedom to Operate (FTO) study useful to alert about risks and allow preventative measures to be developed ahead of time? Would a landscape study reveal industry trends and patenting opportunities in so-called "white spaces"?

Develop a simple, long-range IP strategy and management plan. This step is the synthesis of the various assessments made in the previous steps. It involves articulating the overall strategy and related IP management plan that is based on the detailed analysis of potential risks, untapped resources and underutilized assets that can be



Conduct an objective appraisal of the internal innovation resources. In other words, who creates IP in the company?

strengthened or otherwise monetized (e.g., via licenses, spinouts, etc.). Consistent with budget and goals, the IP plan must ultimately allow the company to focus on preserving; perfecting; transferring; acquiring, and enforcing its IP rights.

Implement the IP strategy and management

plan. Once the overall IP strategy has been reviewed, discussed and approved internally by senior management, implementing it involves taking the necessary steps to follow specific recommendations and remedial measures, as well as measuring performance at each stage and following up as necessary. A quarterly checkpoint and an annual refresh of the assessment and resulting plan is optional but highly recommended. ♥

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.



Self-serving Concern?

GOOGLE'S PATENT SYSTEM PROPOSALS WOULD MINIMIZE STARTUPS AND SMALL INVENTORS BY STEVE BRACHMANN

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

OOGLE General Counsel Halimah DeLaine Prado recently authored a post published on Google's official blog to voice concerns felt by one of the world's richest corporations that the U.S. patent system is in a state of growing crisis. The post offers several suggestions, each sanctioned by Google, as to steps that can be taken in all three branches of the U.S. federal government to address patent quality, abusive litigation and forum shopping.

Unfortunately, the proposed reforms would help very little, if at all, in improving certainty and clarity in patent rights in a way that would improve American innovation by supporting small startups and individual inventors.

Any informed observer of the U.S. patent system can recognize that these proposed reforms would instead do a great deal to advance Google's business interests ahead of others.

Unsubstantiated claims

Prado's April 28 post touts the 42,000 "homegrown" patents authored by Google engineers, Google's licensing of those patents at what readers



are assured is a "fair value," and the sale of patents to bolster the IP portfolios of smaller businesses.

Her post bemoans how "the American patent system is increasingly failing to promote the cause of innovation and progress." Evidence of this purported failure is an unsubstantiated claim that patent quality in the United States is declining.

Prado cites "a rising tide of wasteful patent litigation." She claims patent litigation has increased by 46 percent between 2018 and 2021—but this is linked to a litigation report from RPX that analyzes non-practicing entity litigation campaigns, petitions for America Invents Act trials at the Patent Trial and Appeal Board, and a great deal of other data.

It's nearly impossible to determine where Prado's 46 percent increase in patent litigation figure comes from in the RPX data. Worse, RPX Corp. is notorious for keeping its data secret, thus preventing any independent third parties from vetting for accuracy.

Prado next paints this alleged increase in a way that plays on the natural prejudices people have against the legal system by claiming it is proof that abusive litigation is threatening America's innovation engine. Readers are warned about the return of the "patent troll," a prejudicial term that casts any company enforcing rights against infringers as fairy tale scum. No patent trolls are named.

Infringement maneuvering

Google has a few suggestions for righting the sinking ship of U.S. patent law. In the Executive Branch, Prado encourages policymakers to invest in the USPTO, which she says often doesn't have enough resources to prevent "invalid patents getting issued to inventors."

Prado's claim plays into the nebulous patent quality argument that is a perfect game for Google to play: Patent quality is impossible to measure, but the higher it goes, the fewer patents in force with which Google must contend.

Next, Google wants the federal judiciary to do something about the gamesmanship among patent plaintiffs that has allegedly led to forum shopping—resulting in 25 percent of all patent lawsuits being filed in a single U.S. courthouse. Though Prado never mentions it by name, she's obviously speaking about the Waco Division of the Western District of Texas, led by U.S. District Judge Alan D. Albright. The problem for Prado is that anyone who has a robust understanding of patent law knows Judge Albright has a reputation for being a very fair-dealing judge with a wealth of knowledge in patent matters.

Also, Western Texas (Austin, San Antonio) has a burgeoning high-tech sector—another perfectly reasonable explanation for the rise of patent litigation in Waco.

Readers are warned about the return of the "patent troll," a prejudicial term that casts any company enforcing rights against infringers as fairy tale scum.

Finally, and perhaps most brazenly, Prado urges Congress to take legislative action to restore Google's access to validity trials at the PTAB by removing the USPTO's discretion to deny petitions challenging patents that are in infringement proceedings in U.S. district court—where essentially the same validity challenges are often raised by defendants.

Google has filed the third-highest number of petitions for America Invents Act validity trials at the PTAB. Google isn't filing those petitions to improve American innovation, but rather to evade legal liability for infringement and protect its own corporate revenues from legitimate inventors. €

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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NEED A MENTOR?

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

www.Inventor-mentor.com

Best wishes, Jack Lander

INVENTIVENESS

IoT Corner

Smart lighting manufacturer Insteon abruptly shut down its servers in April—literally leaving its nearly 1.3 million customers in the dark.

Its ecosystem of IoT switches, keypads, dimmers and sensors was rendered useless overnight when the company was unable to connect to servers, making it impossible for users to control their devices. Customers had to find alternate solutions to regain control of their lighting system and will be out hundreds to thousands of dollars to replace their systems.

The company website cited the pandemic and supply chain problem, saying Insteon could not find a buyer. The shutdown is a stark warning about how potentially risky it is for consumers who rely on IoT companies and maintenance of cloud servers for home automation. —Jeremy Losaw

Wunderkinds

Na'am bint Zahran Al-Harrasia was honored as "Youth Intellectual Property Ambassador" in the Sultanate of

> Oman by the WIPO Academy, according to The Arabian Stories. The 14-year-old student invented a type of bioplastic, using natural elements such as rice water and fish scales. The invention is intended to help save oceans from plastic pollution amid bans on single-use plastics around the world, including in the Sultanate of Oman.



Huh? How does the serving dish stay on the pet's back during transport? Why, the patented MagnaDisc, of course. And why would anyone buy this product in the first place? Because it's a prank gift box with nothing inside. Just insert your real gift, secure that the recipient will have very low expectations.

\$30,000

The per-episode salary Sony offered to Mark Cuban for appearing as a panelist on "Shark Tank" many years ago—which the billionaire entrepreneur called "insulting" in a leaked email. "It's nothing I wouldn't have said publicly," Cuban later said.

WHAT DO YOU KNOW?

True or false: Activist/revolutionary Thomas Paine got a British patent for a single-span iron bridge.

→ Which comedian once told Johnny Carson he/she would Like to meet the inventor of the fuzzy toilet seat cover and ask why the inventor decided a toilet seat needed a hat?

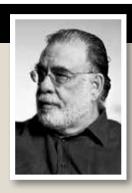
- A) Steven Wright
- **B)** Rita Rudner
- C) George Carlin
- D) Gary Shandling

In which decade was the carbon dioxide laser 3 In which decade was invented—1960s, 1970s, or 1980s?

Director/producer Francis Ford Coppola is credited with which unconventional invention?

- A) Reusable ear swab
- B) Shirt with padded chest
- C) Digital toilet paper dispenser
- D) Backscratching assistance T-shirt

True or false: Activist/revolutionary Patrick Henry ("Give me liberty or give me death!") got a British patent for a bronze coat button.



ANSWERS: 1. True. He got the patent in 1788, but the bridge was never built. 2. B. She added, "Why not shoes, too?" 3. 1964, by Kumar Patel at Bell Labs. 4. D. The T-shirt shows a turtle with a shell that has a numbered grid on it, so a friend can be told precisely where to scratch. 5. False.

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