

Inventors

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DIGEST

PERMANENT MAKEUP PIVOTS
INTO MICROBLADING INNOVATION



SHEILA BELLA

11 Million Patents
USPTO CELEBRATES
LATEST MILESTONE

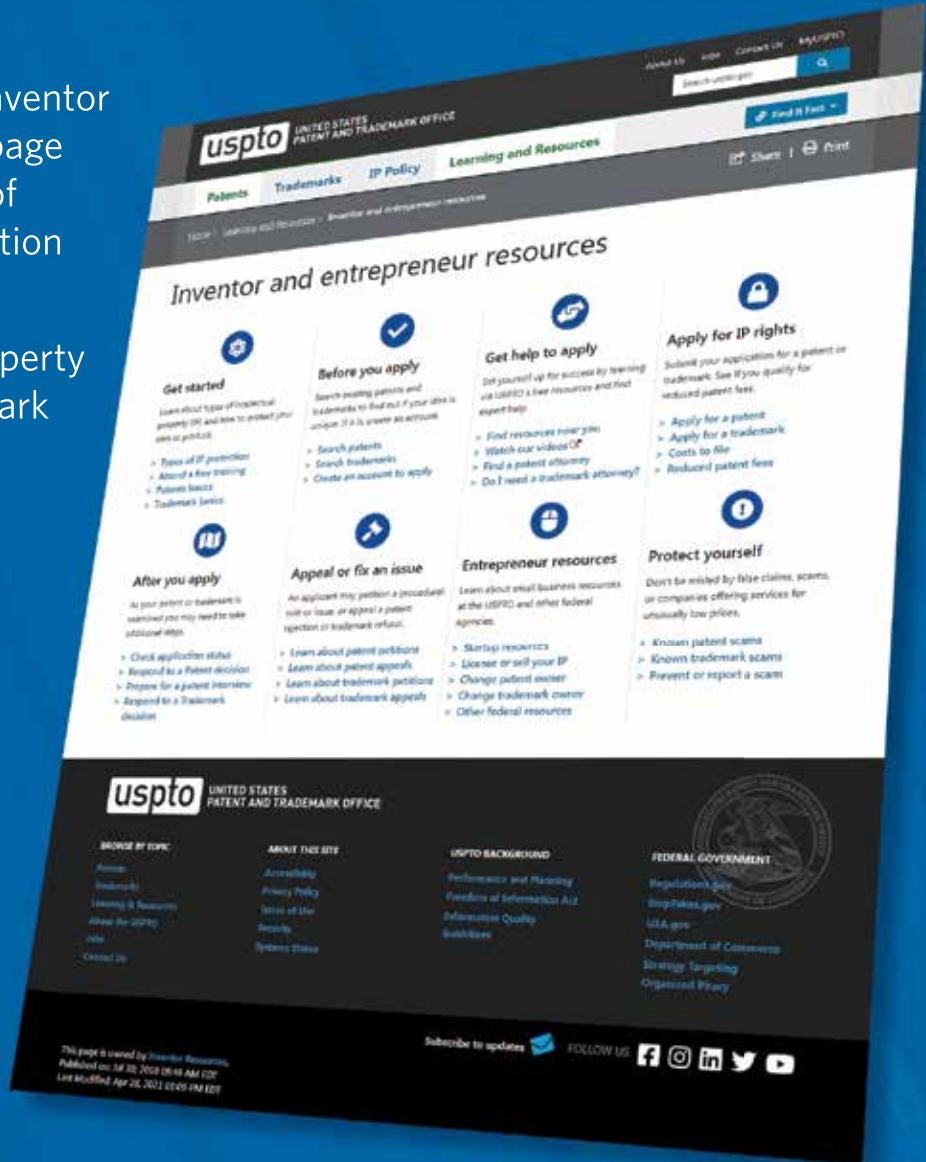
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Resources for inventors and entrepreneurs

The USPTO's newly redesigned inventor and entrepreneur resources webpage can help you navigate each step of the patent and trademark application process with:

- Information on intellectual property (IP) basics, patent and trademark search tools, and how to get assistance with applications
- Links to application systems and fee tables
- Information on checking application status, responding to office actions, and utilizing petitions and appeals
- Links to assist startups and users interested in licensing or selling their IP
- How to avoid known patent and trademark scams



www.uspto.gov/Inventors

UNITED STATES
PATENT AND TRADEMARK OFFICE



Inventors

DIGEST

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The 2 Most Beautiful Words of 2021: In Person

It's Foreigner, live! Brought to you by American innovation.

It's IPWatchdog LIVE! Brought to you by American innovation.

The world's attempt to return to a semblance of normalcy after the fear and devastation of COVID-19 got a historic shot in the arm with the Nov. 9, 2020, announcement by Pfizer that its vaccine was more than 90 percent effective in a large trial. Vaccines by other companies quickly followed.

By December 18, the 45-year-old rock band known for such hits as "Cold As Ice" and "Hot Blooded" announced plans for a 2021 in-person concert at Orlando's Frontyard Festival that was billed as "the world's first live socially distant music festival."

Even with qualifiers, we have been starved for this kind of news—enough to give us hope that we could again enjoy the kinds of events we long took for granted.

I'm not a Foreigner fan. But for the right price, I might have been ready to attend a live concert by Carrot Top in his living room if we could settle on how much he would pay me.

Trade shows and inventor events are also slowly returning to live, in-person status. In mid-May, IPWatchdog founder Gene Quinn announced that the oft-delayed IPWatchdog LIVE event is back on the schedule for Sept. 12-14 at the Renaissance Dallas Richardson hotel.

IPWatchdog LIVE 2021

When: Sept. 12-14, 2021
Where: Renaissance Dallas
Richardson hotel
Details: 2021.ipwatchdog.com

As industry events go, this premier networking event is arguably akin to a Rolling Stones concert in terms of importance and prestige, only not quite as loud. It brings together all different IP segments—from inventors to intellectual property attorneys to dealmakers to technology transfer specialists who work at universities to policy conferences bringing together political leaders and insiders.

The conference is seeking panel proposals and speakers on topics including patent prosecution, patent litigation, copyrights, trademarks, trade secrets, and the business of IP.

Like a rock concert ticket holder in 2021, Quinn can't wait.

"It has been a long road," he told me. "It will be good to get this one in the books."

Thank you, American innovation. Much more to come.

—Reid
(reid.creager@inventorsdigest.com)



Give no quarter to Patent Pirates.

Or they'll take every
last penny.

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



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Patent 11 MILLION



MAGIC MOMENT

11 Millionth Patent Inspired by the Heart

Medical device positions and repositions expandable prosthetic valve

IF THE STEREOTYPICAL INVENTOR is a garage tinkerer, the recipients of the 11 millionth U.S. utility patent are a perfect fit.

The patent, issued on May 11 to co-inventors Jason Diederling and Saravana Kumar at 4C Medical Technologies in Maple Grove, Minnesota, is for a medical device that positions (or repositions) an expandable prosthetic valve in a patient's heart and can prolong lives.

Their discovery is ingenious in its simplicity, involving a catheter tube with a set of wire pairs. Each pair includes one wire with a looped end and a second with a straight end. The pairs work together to deliver, release, and position the prosthetic valve within the heart.

This new device and approach, called AltaValve, is especially intended for situations in which blood is flowing backward through the mitral heart valve.

Kumar said in a statement that the co-inventors are "incredibly excited and honoured" by their milestone achievement. "The 4C Medical beginning is a true story of American entrepreneurship, where Jason and I worked in a garage many nights and weekends to turn this idea into reality."

Diederling said: "4C Medical's approach to inventing is simple. We identified a need, created a solution, and demonstrated its benefits. We are a team of highly driven and creative engineers who are committed to bringing life-saving technologies to people who need it most."

The invention also comes with historic symmetry in the field of cardiac technology.

The original wearable cardiac pacemaker was invented at another central Minnesota company, Medtronic, which was a small startup in the mid-1950s and is now one of the world's largest medical device companies. Fridley-based Medtronic is 11 miles from 4C Medical Technologies.

U.S. Patent No. 11 million comes 35 months after the 10 millionth patent, issued on June 19, 2018, for "Coherent Ladar Using Intra-Pixel Quadrature Detection." The patent application lists the inventor as Joseph Marron of Manhattan Beach, California; the technology is owned by Raytheon Co. in Waltham, Massachusetts.

Unlike the relative simplicity of the process used in Patent No. 11 million, the 10 millionth patent's description entailed 140 words involving detector elements, a photo-sensitive region, and quadrature components. Essentially, it involves a remote sensing method that uses laser pulses to deliver 3D images of Earth and other objects.

The USPTO has granted an average of more than 300,000 patents annually since 2010. It has issued another 1 million design and plant patents, as well as roughly 10,000 patents from 1790 to 1836 before the current numbering system was established.

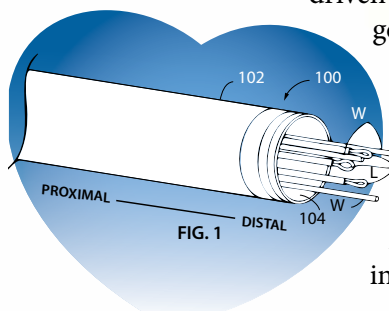
Drew Hirshfeld, performing functions and duties of USPTO director, said the technology provides "a reminder of just how lucky we are at the USPTO to be working with innovators so focused on advancing society."

Said U.S. Secretary of Commerce Gina Raimondo: "This momentous benchmark is a reminder of the remarkable and enduring tradition of American innovation that has

driven our nation forward for generations. Building our economy back stronger requires new ideas and innovative solutions from every sector.

"I am proud to recognise patent 11 million, its inventors, and its promise."

The technology provides "a reminder of just how lucky we are at the USPTO to be working with innovators so focused on advancing society." — DREW HIRSHFELD



NEWS FLASH

Creating Innovators

NSTI program helps provide STEM opportunities through education focused on intellectual property

THE USPTO will conduct the National Summer Teacher Institute (NSTI) on Innovation, Science, Technology, Engineering, and Mathematics (STEM), and Intellectual Property during the week of July 19-23, 2021. The program is virtual this year. Teachers can apply to participate online through June 7.

Participants are introduced to teacher-friendly materials designed to enhance student learning, and inspire the next generation of inventors, entrepreneurs, and problem-solvers.

During a time of increasing emphasis on STEM disciplines for students and would-be inventors, and the essential protections afforded by intellectual property, NSTI combines experiential training tools, practices, and project-based learning models to support elementary, middle, and high school teachers to improve their knowledge of making, inventing, and innovation.

NSTI's main focus is the creation and protection of intellectual property: inventions, knowledge discovery, creative ideas, and expressions of the human mind that may have commercial value and be protectable under patent, trademark, copyright, or trade secret laws.

Intellectual property is modeled as a teaching and learning platform to help inspire and motivate student achievement in STEM disciplines,

computer science, and other fields of study such as innovation and entrepreneurship.

Presentation speakers and hands-on workshop instructors include USPTO experts, noted scientists and engineers, entrepreneurs, and representatives from other federal government agencies and nonprofit organizations. NSTI, which has been recognized as an exemplar of the federal government, is conducted by the Office of Education at the USPTO.

To learn more about NSTI and to apply: uspto.gov/teacherinstitute

Registration information will be available soon for **Invention-Con 2021**, a chance for independent inventors, entrepreneurs, small business owners, and intellectual property professionals to learn from top government and private sector experts. See uspto.gov/events for details.

June is **LGBT Pride Month**. For information on USPTO programs, go to uspto.gov/events.

Nominations for **National Medal of Technology and Innovation (NMTI)** honorees are open until **July 30**. The NMTI is the nation's highest honor for technological achievement, awarded by the president of the United States to America's leading innovators. See uspto.gov/nmti.

K-12 educators from across the United States work together to complete invention projects at the USPTO National Summer Teacher Institute on Innovation, STEM, and Intellectual Property.



PHOTO BY JAY PREMACK/USPTO



TRADING CARD

NO. 3

Forrest Bird

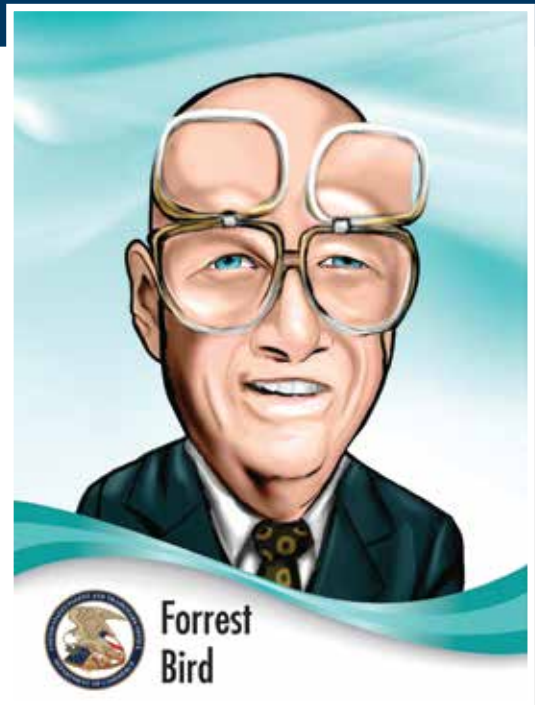
WE HAVE SEEN statistics that convey the horrible death toll of COVID-19. If only we knew the statistics for how many lives Forrest Bird has saved and is still saving with his respirators.

June 9, 2021, is the 100th anniversary of Bird's birth in Stoughton, Massachusetts.

Bird, who died in 2015 at 94, invented the first highly reliable, low-cost, mass-produced medical respirator in the world. Introduced in the late 1950s, the little green box called the Bird Mark 7 Respirator became so ubiquitous that on the 1960s TV show "Dr. Kildare," a common rallying cry when a patient was struggling was "Get the Bird."

His iconic invention, U.S. Patent No. 3,842,828, derived from a strange-looking contraption he devised in 1947 for a friend who had emphysema. Made in part with strawberry shortcake tins, it featured a doorknob on the top that the patient could press in to blow his or her lungs out in order to better breathe as he or she used the mouthpiece.

Asked in a 2007 "60 Minutes" interview whether Bird had any idea his homemade gizmo would



become the foundation for respiratory care in hospitals worldwide, he smiled and said: "Not the foggiest."

His medical respirator had a strong connection to his lifelong passion for flying.

Throughout his life, Bird flew a 1938 Piper Cub light aircraft given to him by his father, a World War I pilot. It struck him how air flowing over the wings of a plane was similar to air flowing through the human lung.

Bird became a technical air training officer with the Army Air Corps during World War II. As planes

DREAM TO HELP OTHERS REALIZED

USPTO's Pro Bono Program helps solve inventor's quest for a patent that 'was going to be impossible'

WHEN MICHAEL LOPEZ noticed that the delivery ramps on trucks he drove failed to fit delivery locations and led to serious injury for delivery people, he set out to solve the problem. But he had a problem of his own.

After developing the Halo Ramp—a portable ramp designed with a pivot to allow maneuverability, user convenience, and maximum safety—he knew he would need a patent attorney if he was to get a utility patent for his invention.

"This was out of reach financially for me," he said. "It was still out of reach. It

was going to be impossible."

Then a delivery customer told him about LegalCORPS's Inventor Assistance Program, which connected him to legal services provided by some of Minnesota's best patent lawyers.

Now he is the proud owner of two patents for his "Delivery ramp with an adjustable, rotatable pivot" invention: U.S. Patent Nos. 9,694,997, issued July 4, 2017, and 10,807,814, issued October 20, 2020. He also received a grant from the Minnesota Department of Economic Development.



**Patent
Pro Bono
Program**

LegalCORPS is one of 21 regional programs that make up the USPTO's Patent Pro Bono Program, a nationwide network of independently operated regional programs that match volunteer patent professionals with financially under-resourced inventors and small businesses throughout the United States to secure patent protection. Find services near you by searching your state at uspto.gov/locations.

Another USPTO service for lower-income individuals and companies is the Law School Clinic Certification

began to exceed altitudes at which pilots could breathe unaided, he investigated technologies for solutions.

His portable inventions helped revolutionize procedures in intensive care units during a time when expensive, cumbersome iron lungs had been the device of choice for helping respiration. His “Babybird Respirator” (U.S. Patent No. 3,191,596), introduced in 1970, reduced infant mortality for those with respiratory problems from 70 percent to less than 10 percent worldwide.

Bird once met Orville Wright. He flew with Howard Hughes. He eventually owned—and flew—21 aircraft. He was inducted into the National Inventors Hall of Fame in 1995 and was awarded the National Medal of Technology and Innovation in 2008. Yet he was always humble, energetic, and hard-working.

His wife, Dr. Pamela Riddle Bird, said: “Forrest saved more lives than anyone else in history.”

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

Program (LSCCP), which includes over 60 participating law school clinics that provide legal services pro bono to inventors, entrepreneurs, and small businesses.

Participating law school clinics provide patent and/or trademark legal services to qualified members of the public who are accepted as a client of a clinic.

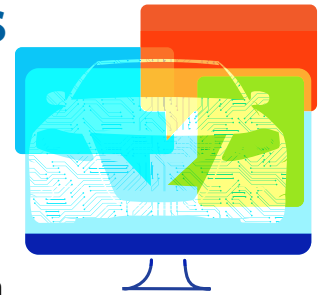
Through the Patent Pro Bono Program and LegalCORPS, Lopez was able to bring his vision to market and help protect fellow delivery people.

Both the Patent Pro Bono Program and LSCCP have mandatory income thresholds and other requirements for accepting new clients. To determine whether you may qualify and for other information, go to uspto.gov/PatentProBono and uspto.gov/LawSchoolClinic.

WHAT'S NEXT

DESIGN WEBINAR SERIES

Free events this month for inventors in vehicles, electronics, and user interfaces



Inventors involved with vehicles, as well as those who deal in electronics and user interfaces, can leverage design patent strategies in their intellectual property portfolios through the USPTO's Design Webinar Series this month.

With relatively low cost and fast prosecution, design patents add value to any portfolio. Yet design patents are often overlooked when developing patent protection and branding strategies. In addition to the obvious benefits of the relatively low cost and fast prosecution associated with design patents, learn why design patents are a strong value add to any portfolio.

Join Damian Porcari, director of the USPTO's Midwest Regional Office, a panel of design examiners, patent experts in the Midwest region, and other leading designers in the vehicles industry to discuss the role and value of design patents. The free event is **June 10** from 1-2:30 p.m. ET.

Speakers will cover:

- Challenges and nuances in protecting different types of vehicles
- Benefits design patents provide in vehicles and other components

TO REGISTER: uspto.gov/about-us/events/design-webinar-series-vehicles

Join Stephen Koziol, acting regional director of the USPTO's Silicon Valley Regional Office, a panel of design examiners, patent experts in the Silicon Valley region, and other leading designers to discuss electronics and user interfaces at the free **June 17** webinar from 1-2:30 p.m. ET.

Speakers will cover:

- Nuances in protecting electronics and user interfaces, particularly in view of new and emerging aspects of these technologies
- Graphical user interfaces, animation, virtual reality, and more
- The benefits of design patents in various industries

TO REGISTER: uspto.gov/about-us/events/design-webinar-series-electronics-and-user-interfaces

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

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Whether you have a conceptual idea, stick-figure diagram, full-scale prototype or market-ready product, we want to hear about it.



Day after day, thousands of people like you, trust Edison Nation's "As Seen on TV" team to develop their ideas into great products that are successfully marketed worldwide.



Recently successful brands



Submit an idea today at www.edisonnation.com/ASOTV

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):

“New Coke’s Old Debate” (January 2020):

I drank Coke before Pepsi existed (mid 1960s). That formula worked. Coke had its rich taste, and Pepsi when it came out was like a watered-down version of Coke. ... Pepsi pushed the Diet Pepsi, and Coke tried to follow and started to mess up the formula. LEAVE IT.

—BEESSER@HOTMAIL.COM

(Editor’s note: Pepsi debuted in 1893. Some say New Coke’s 1985 rollout was marketing genius because it stoked controversy. Coke vs. Pepsi is an ironic debate because many people can’t taste the difference, even though they say they can.)

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

These are great ways for taking amazing pictures. Acting natural and pretending you are not having a picture taken are the best-looking pictures, in my opinion. Thanks for sharing.

—MARZIA, CLIPPINGPATHGROUP.COM



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



SHOT IN THE ARM, OR VIOLATION OF IP RIGHTS?

Should there be exceptions for safeguarding intellectual property protection?

A dramatic recent rise in COVID-19 cases in India and South Africa had those countries urging the United States to relax IP protections on coronavirus vaccines in order to increase the vaccine supply. On May 5, the Biden Administration announced it agreed to order those protections be temporarily lifted and that the United States would participate in negotiations over the issue at the World Trade Organization.

The waiver lets other countries share America’s COVID vaccine IP and pursue their own coronavirus vaccines without

fear of patent infringement lawsuits. This would also apply to therapeutics and medical supplies.

“This is a global health crisis, and the extraordinary circumstances of the COVID-19 pandemic call for extraordinary measures,” U.S. Trade Representative Katherine Tai wrote.

Proponents hailed the decision as one that placed humanity over special interests. Others—even those in India—said the move was ill advised and uninformed.

Eva Bishwal of Uttar Pradesh, India-based Fidus Law Chambers wrote on May 5 that “the real blockades to vaccine access are state inaction, dearth of raw materials and low production capacity.”

Pharmaceutical and biotech companies, facing lesser future profits with such a move, predictably criticized it and claimed it will jeopardize safety.

Opponents argue that a drugmaker having the formula or recipe for a vaccine doesn’t mean that it could produce it—not to mention produce it quickly. Such a process is highly specialized and involves time-consuming technology transfer that could negate the effort to get effective shots into arms faster.

Most important, they say, such a precedent would be a major blow to America’s entrepreneurial system by sending a message that if a company works to produce an effective product or solution, the government can step in and give away trade secrets. (See story, Page 44.)

One solution could be to force companies that hold patents to donate significant quantities of the vaccine, or sell it at cost.

Heated negotiations are expected and could keep the deal in limbo for a while.

BRIGHT IDEAS

Eye Mask

3D ERGONOMIC EYE MASK

ostrichpillow.com

Billed as the first truly 3D ergonomic eye mask, the product features a design that adapts to the face's three-dimensional features. It fits perfectly on all head sizes and face types, providing a 100 percent blackout experience.

Eye Mask consists of six different layers of materials for comfort and functionality. The mask is machine washable.

The design creates a cavity that lets you open your eyes while wearing it, so you experience total darkness without pressure on your eyelids.

Eye Mask has a recommended retail price of \$45. Shipping for crowdfunding Rewards backers is set for September.



“Create lightning bolt ideas during brainstorming by causing disturbances in your atmosphere.” —RYAN LILLY



VAVA Portable SSD Touch

FINGERPRINT SECURITY
EXTERNAL STORAGE DRIVE

vava.com

Secured with the touch of a finger without apps or passwords, VAVA SSD Touch provides fast transfer speed (up to 540MB/s) and multi-device compatibility.

VAVA SSD can record up to 10 sets of fingerprints. It also accelerates game load speed for console games. Shock resistant, it can be dropped from a height of up to 4 feet with no damage to data.

Setting the fingerprint unlock mode takes just a few seconds, with an app walking you through the process.

VAVA Portable SSD Touch will retail for \$292. Shipping has been delayed; check the website for more details.

Click & Grow 25

MODULAR INDOOR GROWING SYSTEM

clickandgrow.com

The space- and energy-efficient Click & Grow 25 is an indoor plant growing solution that provides a continuous, significant harvest for a healthier diet.

The system works like a Nespresso coffee machine—except instead of coffee pods, biodegradable Smart Soil plant pods are used to grow fresh greens throughout the year. All pods contain seeds, calibrated nutrients and strong pH levels to facilitate conditions for accelerated plant growth. Click & Grow 25 features a patented tray system.

Click & Grow 25 will retail for \$799.95. Shipping for crowdfunding Rewards backers is planned for February 2022.



POSSIBLE DELAYS

Coronavirus-related factors may result in changing timetables and later shipping dates than companies originally provided.



FlexBeam

TARGETED RED LIGHT THERAPY DEVICE

theflexbeam.com

FlexBeam claims to be the world's first targeted red light therapy device to enable active people and athletes to relieve, recover and repair faster.

Light at specific red and near-infrared wavelengths is clinically proven to spark a physiological healing response in the body. It can also aid in sleep and reduce depression.

FlexBeam provides a targeted application of red and infrared light that works directly where it is needed and generates vital systemic effects for the whole body.

FlexBeam will retail for \$539, with shipping for crowdfunding Rewards backers set for June.

A Tale of Twists

THE PHILLIPS HEAD SCREW AND SCREWDRIVER ORIGINATED WITH ANOTHER INVENTOR'S DESIGN **BY REID CREAGER**

ON JAN. 5, 1920, the Boston Red Sox sold the contract of 24-year-old pitcher/outfielder Babe Ruth to the New York Yankees for \$100,000.

Given that this became perhaps the most noteworthy and one-sided transaction in baseball history, one could uneloquently say that the Yankees put the screws to the Red Sox.

Fifteen years later, a transaction for a screw design patent between two Portlanders—businessman/engineer Henry F. Phillips and

inventor John P. Thompson—eventually became just as lopsided, if not more.

In 1932, Thompson applied for the patent rights on a “Screw” (U.S. Patent No. 1,908,080) with a “cruciform groove” and a matching “Screw driver” (U.S. Patent No. 1,908,081). He is still listed as the inventor on both applications, both of which were granted the following year.

But Thompson’s attempts to sell his design to screw manufacturers yielded frustrating results.

He couldn’t understand why: After all, with mass, automated production of cars ramping up a decade earlier, a screwdriver that slipped out of a one-slot screw could slow production or even damage the screw head and force its removal. Thompson’s cross design allowed for centering of the screwdriver and more uniform torque, reducing the chances for delays and damage to the screw.

Manufacturers apparently balked because they believed the punch that would create the cross imprint or recess would destroy the screw head.

So Thompson sold the patent to Phillips in 1935—willingly, by all indications. The sale price has never been reported.

Lucrative tweaking

Phillips, who had formed the Phillips Screw Co. the year before, refined Thompson’s crosshead design for easier manufacturing.

On July 7, 1936, he was granted three patents: “Screw,” U.S. Patent No. 2,046,343;

“Means for Uniting a Screw With a Driver,” U.S. Patent No. 2,046,837; and

“Screwdriver,” U.S. Patent No. 2,046,840.

The key to all three patents was to engineer a star-shaped screw that would eliminate the punch concerns manufacturers had about Thompson’s invention. In the “Screw” patent, Phillips wrote:

“The principal object of this invention is to provide a tool-receiving recess which may be formed in the head of a crew by a simple punching operation wherein the proper and equal displacement of the metal during such punching operation is an important factor, and wherein, also, the recess in its final form will embody a plurality of relatively wide and flat-bottomed grooves.”

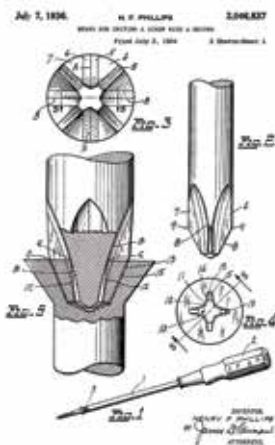
Phillips then called on manufacturers in hopes of succeeding where Thompson had failed. His optimism was rewarded when American Screw Co., America’s biggest screw manufacturer, showed interest.

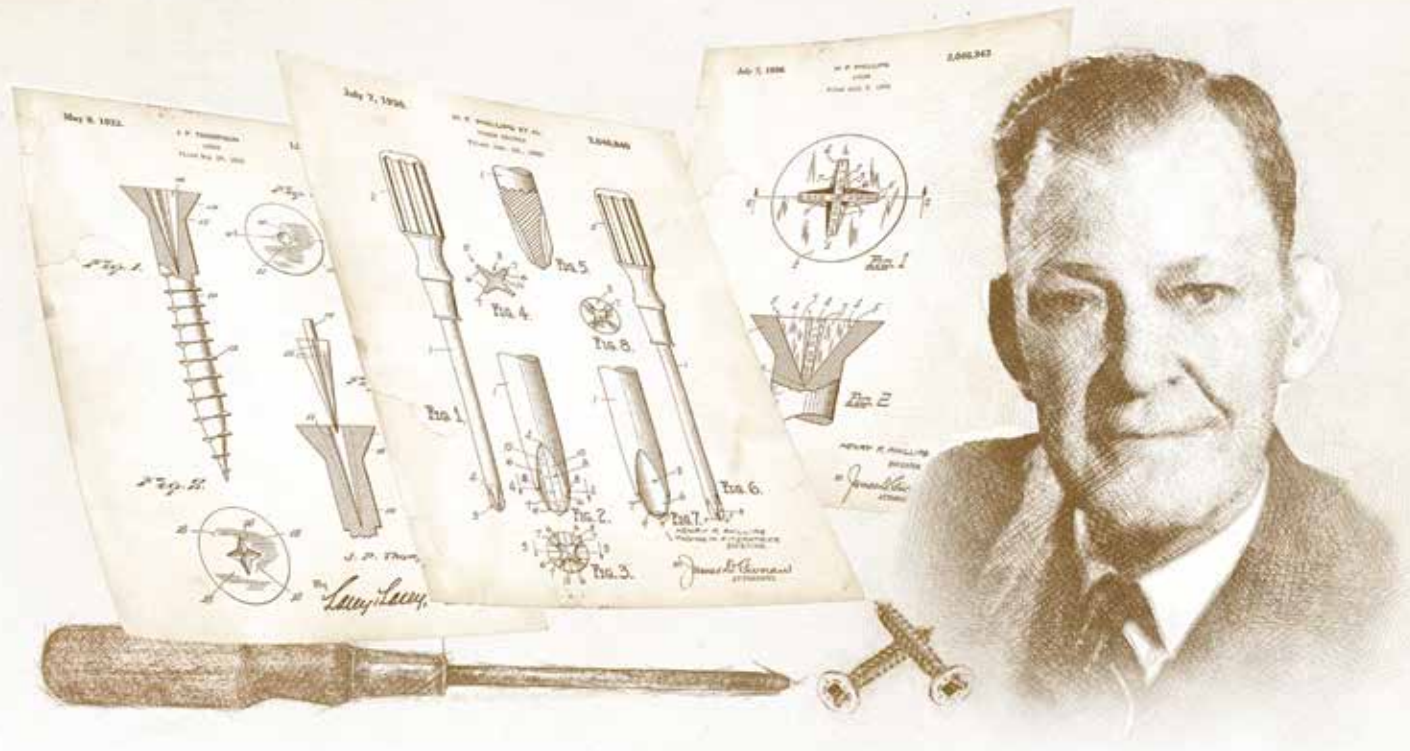
Not everyone in the company was sold on this new screw design. President Eugene Clark rebuffed his engineers by saying, according to many reports, that “I finally told my head men that I would put on pension all who insisted it could not be done. After that, an efficient

PATENT PATHWAY



U.S. Patent No. 2,046,837, “Means for Uniting a Screw With a Driver,” reads with this classification: Screwdrivers characterised by material or shape of the tool bit characterised by cross-section with cross- or star-shaped cross-section. The inventor is Henry F. Phillips.





John P. Thompson sold his patent to Henry F. Phillips in 1935. The sale price has apparently never been reported.

method was evolved to manufacture the fasteners and now we have licensed all other major companies to use it.”

With the deal finally tightened, the Phillips head screw soon revolutionized assembly lines and American life in general. It became available to consumers in 1936.

General Motors began using the Phillips system in its 1937 Cadillacs; by one report, 85 percent of screw manufacturing companies had a license to produce the Phillips screw recess design by 1940.

The Phillips was now used by virtually the entire automobile industry, as well as in railroads and aviation. It was a staple on products and vehicles during World War II and remains ubiquitous today.

An anonymous death

Phillips did not live much longer to enjoy the success of his namesake product. He retired in 1945 due to poor health and died in 1958.

Much less is known about Thompson.

Oregonencyclopedia.org says Census records indicate he worked as a bank cashier and in real estate before moving to Oregon. A 1939 Sunday Oregonian article said he was an auto mechanic when he invented the screw. He died in 1940, just five years after his patent sale to Phillips.

(By the way, Thompson’s cross-shaped design wasn’t the first to fail to gain universal acceptance. About 60 years earlier, English inventor John Frearson patented a screw with a “cruciform orifice” that never gained traction.)

The patent for the iconic cross-shaped screw head expired in 1966, just 31 years after Henry F. Phillips’ historic purchase and innovation made it one of the smartest deals of the 20th century. 🍷

When Henry F. Phillips’ tweaked design was accepted by the American Screw Co., the Phillips screwdriver soon revolutionized industry.

INVENTOR ARCHIVES: JUNE

June 19, 2018: The **10 millionth utility patent** was issued by the United States Patent and Trademark Office.

The occasion was marked by a cover story in that month’s *Inventors Digest*. The milestone patent was for “Coherent Ladar Using Intra-Pixel Quadrature Detection.”

The patent application lists the inventor as Joseph Marron of Manhattan Beach, California; the technology is owned by Raytheon Co. in Waltham, Massachusetts. Ladar stands for LAdar Detection And Ranging. It is useful in fields that include autonomous vehicles, medical imaging devices, military defense systems, and space and undersea exploration.



PHOTO BY JEFF ISAACS/USPTO

Marketing Channels: Use This Sequence

THE PREFERRED VEHICLE FOR YOUR
NOVEL PRODUCT MAY SURPRISE YOU **BY JACK LANDER**

IN BASEBALL, when a fair ball is hit, the runner heads for first base. He or she could bypass first base and head to second base—but at the risk of being thrown out.

There are hundreds of ordinary examples of actions we perform in a certain sequence without thinking. We put on our jeans before we put on our shoes because reversing the sequence doesn't work well.

The same logic applies to marketing an invention we produce.

We can start our marketing with Amazon because it sells 50 percent of the e-commerce in the United States and is growing at an annual rate of 2 percent to 3 percent. That's an exceptionally inviting market channel. It almost seems like guaranteed success.

But is it?

A client of mine had invented a hair dryer accessory and was contemplating selling it on Amazon. I checked the hair dryer category and found 307 entries. His product would become the proverbial needle-in-a-haystack among so many entries.

If people knew about the accessory and were searching for it, they might be patient enough to search through those 307 entries and find it. But a novel product is best bought as an impulse item at first. And when it becomes well known, it graduates to the level of the intentional purchase as against that of the impulse purchase and graduates from the minors to the majors: the retail chains.

Catalogue advantages

So, what's the answer? If your product is novel, start your marketing in catalogues.

Paper catalogues may seem out of date because much of their business is now done on the internet. But one attraction of the catalogue is entertainment. Page after page, we browse and discover products that we haven't seen before.



Retail stores are seldom in the business of gambling on novel products, or those without a substantial sales history.

A second attraction is that paper catalogues offer brands you won't find on Amazon: L.L. Bean, for example.

An excellent example of a modern catalogue is Brookstone's. Like L.L. Bean, Brookstone isn't merely a paper catalogue; it sells from its website and has retail stores in many malls. Not all catalogues are this well integrated, but don't bypass them if your product is novel.

Another important reason to start marketing in catalogues: if you start on Amazon, the catalogues won't want your product. They know that many of their readers will see an item in their catalogue and then check Amazon to determine if it sells the same product cheaper. Catalogues can't stay in business if they act as free advertising for Amazon.

Home shopping networks—QVC and HSN, for example—are also places to consider before marketing on Amazon. The same rules apply to these marketers as they apply to catalogues: They won't welcome your product if it is already selling on Amazon. They want exclusivity, not competition.

A disadvantage to market entry with these businesses is that you own the inventory. They pay you *after* they sell it—whereas most catalogues will accept your invoice and pay according to their terms, as late as 90 days in some cases.

Catalogues and home shopping networks provide publicity for your product. If your product creates a buzz and becomes known, it should sell much better on Amazon.

No. 2: Specialty stores

If you are very fortunate and your product creates an ongoing level of demand, you should be able to eventually sell it through retail stores.

But retail stores are seldom in the business of gambling on novel products, or those without a substantial sales history. The retailers want every square foot of their shelf space to produce a certain minimum return on investment, and sales of novel products would depend on busy shoppers stopping to investigate an item that is not familiar. Their mood is significantly different than that of a person relaxed in a comfortable chair browsing through a paper catalogue.

One retail exception may be the boutique, or narrowly focused specialty stores. But be sure to check Amazon.

As I wrote this article, I assumed that large power equipment such as a lawn tractor would be sold only in local specialty stores, not on Amazon. I checked and discovered I was wrong. One lonely Husqvarna lawn tractor was featured.

But if I were to buy a lawn tractor today, I would want to buy it locally so that I could take it in for repairs by the dealer who sold it. June sunshine grows grass as fast as Jack's beanstalk, and I don't want to face a sales associate with a "You didn't buy it here" look on his or her face when I need service or parts.

Here's your batting order

So, marketing success depends on acceptance by the channel of your choice. And acceptance depends on a channel's perception of existing competition and your product's sales history. The sequence is critical:

- Catalogues;
- Boutiques/specialty stores;
- Home shopping networks;
- Retail stores, including Amazon.

The retail channel is not for market testing unless you are an established company with a lot of money to spend on advertising, and you have the patience and gambling instincts of a snail crossing an interstate highway.

As I have emphasized in many articles, catalogues want to be contacted with a sell-sheet. It must be in the body of your email, not attached.

They don't want snail mail. They don't want phone calls. And they emphatically don't want samples until they ask for them.

Best wishes for your success. And pay no attention to any rumor that it was *my* beanstalk that disgraces your neighborhood. That was another Jack altogether. ☺

Jack Lander, a near legend in the inventing community, has been writing for *Inventors Digest* for 25 years. His latest book is *Marketing Your Invention—A Complete Guide to Licensing, Producing and Selling Your Invention*. You can reach him at jack@inventor-mentor.com.



Extend That Facebook Reach

CONSIDER THESE FOUR QUESTIONS WHILE RE-EVALUATING YOUR MARKETING AND SELLING STRATEGY **BY ELIZABETH BREEDLOVE**

FACEBOOK MAY BE “OLD NEWS” compared to other, newer social networks such as TikTok or Clubhouse, but it’s still the dominant social platform with more than 2.8 billion monthly active users.

Earlier this year, Hubspot compiled and shared these statistics about Facebook:

- Seventy-three percent of U.S. adults visit Facebook every day.
- In 2018, 78 percent of U.S. consumers made purchases through discoveries on Facebook.
- U.S. adult users spend an average of 33 minutes per day on Facebook.

If your business is on Facebook, how does it stack up? Are you reaching your audience there? Are you seeing your audience grow?

If things seem to be lacking, it may be worth reconsidering your strategy. Once you understand who your audience is and what they like, you can use the Facebook algorithm in your favor to improve your organic reach on the platform.

What kind of page are you?

When was the last time you thought about who your audience is and what they do on Facebook?

In the past, you could use Facebook’s Audience Insights tool to identify and learn more about your audience on the platform. But Facebook is doing away with this tool starting July 1, 2021.

Instead, you’ll want to use Facebook Business Suite Insights, which will allow you to access Audience Insights across both Facebook and Instagram. With this tool, you’ll be able to access data about your audience such as page likes, age, gender, location and interests.

Using this data, you should be able to form an idea of who your audience is. Once you have a handle on this, you can begin to determine which pages they like on Facebook.

This is where your strategy comes into play. By associating yourself with the pages your audience already likes, you’ll begin to send signals to the Facebook algorithm about what kind of page you are, which in turn helps the algorithm put your page in front of the right audience.

To do this, begin interacting with pages similar to your business’s page.

Like images they post. Comment on links they share. Share videos they post to your own page. Engage with similar pages with large audiences



over a long time, and the algorithm will begin to associate your page with theirs.

What kinds of messages do you share?

While you're working to build a reputation as a page similar to the pages your audience already likes and engages with, you can also work on perfecting your message. As you're thinking through your messaging, remember: It's not about you. It's about your audience.

In other words, go beyond crafting a message describing what you offer that you think your audience will like. Instead, think about what your audience wants others to know about them, the key to audience interaction.

Remember, nothing on Facebook is private. So provide a message that your audience will want for interaction.

For example, if you've invented a product that makes homes smell fresh, don't have your messaging focus on stinky homes; focus on clean, cozy, great-smelling homes.

And remember: Promotional content is OK in moderation, but it's not the best way to grow your reach. More on this next.

What kind of engagement do you need to improve your reach?

Now that you've started to associate yourself with things your audience already likes and you have a general idea of your message, you can start to craft content that will lead to engagement and increase your reach. But remember, on Facebook not all engagement is created equal.

Engagement such as likes or reactions, comments and shares all send different signals to the Facebook algorithm. Generally speaking, actions such as comments and shares carry more weight than likes and reactions. A well-rounded page full of engaging content that gets likes, reactions, comments and share is almost certainly going to make the biggest impact on your overall organic reach.

Some strategies to get different types of engagement and send signals to the Facebook algorithm so that you can grow your organic reach:

- Photos, images and memes tend to get the most likes. These are easily viewed as users

scroll down their news feed, and it's easy to tap the "like" button and keep scrolling. Per We Are Social, on average in 2021, 35.7 percent of posts from a Facebook page are images.

- Videos can be a very effective way to get someone to share your content. Facebook makes it easy for someone to share a video to its newsfeed, through Messenger, through WhatsApp, to a group, to a page, and even to Twitter. It's up to you, though, to create a video worth sharing. Remember that many people watch videos with the sound off, so consider captioning the video or using animated words.
- Start a conversation to get comments. For example, ask a question that you know nearly everyone in your audience could answer, or post an unpopular opinion and ask whether people agree or disagree.

What can you do with your improved reach?

Remember, Facebook marketing—and social media marketing in general—is a long game. You're not going for shallow engagement and viral content, though of course it can be nice if it happens. Your goal is to build loyal brand advocates who will support your business and engage with your content to help you continue to grow your reach.

Once you start to see your reach growing, continue to follow the same strategy while also learning from what is and isn't working. Aim for about 80 percent of your content to be focused on getting engagement and building up your reach; use the other 20 percent to promote your product.

You'll see much better results this way as you provide interesting content and build a relationship with your audience before trying to make a sale. 📌

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.





Making Practice More Perfect

MUSCLE-MEMORY TRAINING SYSTEM
CORRECTS ATHLETES IN REAL TIME **BY REID CREAGER**

The patented E-Sports Trainer's prominent and distinguishing feature is the Chip-On-Board technology that allows the product to speak many different phrases and talk to the user in seven different languages.

S HAWN MOYE'S invention involving muscle memory began with a vivid memory involving his son.

Elijah was a little boy who showed an interest in playing basketball, so he and his father went to the park to practice.

"I wanted to make sure he got the fundamentals of shooting a jump shot early, because I didn't want him to develop all the bad habits that a coach would have to correct later," Moyer says. "I am a firm believer that you must have a solid foundation before you begin to build.

"As I began to think about what I could do, I realized that the challenging part wasn't teaching him the proper form but his maintaining the proper form when practicing on his own. What good is it to shoot 1,000 jump shots, but they are with improper form?"

Moyer looked around the park. Surely, he wasn't the only father with this problem.

"I thought about the kids whose parents didn't have time to work with them, or the parents who didn't have the money to go to top camps, and about the parents who don't understand enough about the sport to work with their kid."

This sparked the idea for the E-Sports Trainer.

Unique technology

The patented device was created to help the user maintain proper muscle memory when practicing. Although there have been other sports

training devices that provide user feedback, the E-Sports Trainer's prominent and distinguishing feature is the Chip On-Board technology that allows the product to speak many different phrases and talk to the user in seven different languages—English, Spanish, Mandarin Chinese, German, French, Italian and Russian—while correcting him or her in real time.

The E-Sports Trainer also tracks and measures performance in real time, allowing the user to know when there is improvement.

A fine athlete himself, Moyer says his invention has possibilities for even amateur and professional teams—"anyone looking for continuous improvement. The version I started with is for basketball, but this product will focus on a specific area for each sport."

Each sports version will come in three different levels to grow with the user:

- Level 1 has a pre-set specification range, with the goal of creating the initial muscle memory. In the case of shooting a jump shot, the product moves the elbow closer to the body when releasing the basketball. The elbow pulling away from the body while shooting the basketball is considered improper form.
- Level 2 has a tighter pre-set specification range designed. In this case, it keeps the elbow closer to the body now that the muscle memory has been developed.
- In Level 3, the specification range is set by the user. Again in the basketball example, the

unit allows the user to go through his or her natural shooting form once and record that form. If the user deviates from that form, the unit talks and corrects him or her in real time.

“When you spend thousands of dollars to go to specialized sporting camps or work one-on-one with coaches—which I did, but everyone can’t do—they must be around to ensure you are practicing correctly,” Moye says. “This product provides you with a safe place to correct and be corrected, and avoids public humiliation. You can develop the correct behavior in your bedroom, living room, almost anywhere.

“When you shoot a basketball properly, it will speak phrases of encouragement—but if improperly, an alarm will talk and tell you to keep your elbow tucked in. The product has a display screen able to track the number of times the device was used correctly.”

10-year odyssey

Moye has as much passion for inventing as he does for excellence in sports. It has always been that way.

“When I was a very young, maybe 7 or 8, I started coming up with all these ideas, but I didn’t know what to do with them,” he says.

The E-Sports Trainer is the byproduct of all those years of dreaming and determination: “It has taken about 10 years of research, learning, motivation and dedication to get his invention patented and ready for sale. It has taken a lot of prototypes, feedback sessions and redevelopment.

“There were a lot of times when I wanted to give up, but my dreams wouldn’t let me sleep.”

He didn’t sleep when it came to intellectual property. He made sure to get a utility patent for his invention.

“I did start with a provisional patent, which provided me a one-year extension to the filing of my patent application. I was able to lock in a date and discuss my idea and work with a designer to see if it would be something that could be developed before the year expiration date of the PPA.”

Moye is building inventory to sell the E-Sports Trainer on the product website, and at sports camps. You can view demos at youtu.be/_dakG-begK8E and youtu.be/akCFpDsJY28. 📺

Details: e-sportstrainer.com

“There were a lot of times when I wanted to give up, but my dreams wouldn’t let me sleep.” —SHAWN MOYE



Up and Away

MOTHER'S CAR SEAT CARRIER KEEPS BABIES SAFELY IN SHOPPING CART, AND OUT OF THE WAY **BY EDITH G. TOLCHIN**

WHEN I WAS a young mom with small children, there was always a need to take them grocery shopping.

Shopping carts are often messy, with the seat portions often germmy and the so-called “safety” belt missing. Imagine testing your reflexes to catch your kiddie climbing out of the cart while juggling a bottle of O.J. about to shatter on the market floor.

So, what if the little one cannot sit by himself or herself but you still need to shop? With Totes Babies Car Seat Carrier—an idea that originated with Lindsey Valiulis Fleischhauer of Naperville, Illinois—he or she stays in the car seat and safely sits *over* the shopping cart without compromising on valuable shopping cart real estate.

Edith G. Tolchin (EGT): How does the Totes Babies Car Seat Carrier work, and how did it come about?

Lindsey Valiulis Fleischhauer (LVS): The Totes Babies Car Seat Carrier is “Shopping with Babies, Made Simple!” You just unroll the Totes Babies and lay it onto the shopping cart.

There are adjustable arm grips that work with most carts.

Adjust the grips to

the cart, place the car seat into the Totes Babies carrier, adjust with the safety straps and shop away! The Totes Babies holds over 75 pounds and works with newborns, up to—usually—1-year-olds, or when they convert to the convertible car seat.

This product allows full cart access for parents when shopping. The idea came about when I was shopping with my newborn and it was a disaster trying to get everything I needed, as the car seat takes up the entire shopping cart area.

One day while I was shopping, a light bulb went off and I had the idea. I went straight to my dad, Stan Valiulis, who holds over 40 patents from his retail store fixture background, and together we got to work on the idea!

I’m not only the cofounder with my dad, I used the product with both of my sons and it was a total lifesaver. Parents can also have their toddlers in the front of the basket and the Totes Babies behind them, which helps parents out with multiple little ones.

EGT: Have you invented anything before?

LVS: I helped with some projects back when I was working in sales, yet this was my first actual invention. We have a few other inventions in the works, and I can’t wait to keep the ideas flowing.



“I was shopping with my newborn and it was a disaster trying to get everything I needed, as the car seat takes up the entire shopping cart area.”

— LINDSEY VALIULIS FLEISCHHAUER

EGT: Is the product patented?

LVS: Yes, we have three patents: two utility patents and a design patent. We have two more patents pending for the Totes Babies and additional products to come.

EGT: How many tries did it take before you had the perfect prototype?

LVS: My dad made our first prototype with adjustable curtain rods, a drop cloth and staples, and from that we worked with a friend who is an engineer.

We had quite a few samples that we worked on before it was perfect. We wanted to make sure it was exactly how we wanted it to be.

We also knew upfront that we wanted it to be simple, safe, super sturdy and easy to roll up to have in a diaper bag or purse. The Totes Babies also comes with a carrying bag. I would always keep mine in the back seat of my car.

EGT: Where are you manufacturing?

LVS: We are manufacturing in China.

EGT: Have you had any obstacles in developing this product?

LVS: With any new business there are, most definitely, obstacles and it is important to be able to learn from mistakes and grow from them. COVID-19 brought our sales down a bit, yet we are fortunate that sales did continue and that our product helps babies and parents while shopping. To be able to see our happy customers sending us pictures shopping with their sweet babies is truly one of my favorite parts of this business.



EGT: Because this is a product for babies, are you safety-testing with a third-party lab for Consumer Product Safety Improvement Act certification?

LVS: Yes, we definitely had safety testing done multiple times that meets the CPSIA certification.

EGT: I understand you were on “Shark Tank.”

LVS: “Shark Tank” was an incredible experience and a dream come true for us as entrepreneurs. To be able to pitch our business on national television on a show we have watched for years will be something we will never forget. It was totally out of our comfort zone, yet it was so beneficial for our business.

All the Sharks were amazing, and we took all their advice and ran with it. We did a deal on the show with Lori Greiner. She is great! (*Editor’s note:* In the episode, which aired in March 2021, Greiner agreed to give \$100,000 in exchange for a 25 percent stake in the company.)

The Totes Baby Car Seat Carrier includes adjustable arm grips that work with most carts, as well as safety straps.



EGT: Where are you selling the Totes Babies Car Seat Carrier?

LVS: We are selling on our website; Amazon; buybuy Baby; Bed Bath & Beyond; and Walmart.com.

LVS: Simply go for it! You should certainly do your research ahead of time as far as patents, safety testing, manufacturing, and so many other things that are required to develop a new product.

Do know that it takes time to get a product going and learn from any mistakes that may happen along the way. If it were easy, everybody would be doing it—so work hard and never stop dreaming up new ideas. 📞

Details: totesbabies.com

Books by **Edie Tolchin** (egt@edietolchin.com) include "Fanny on Fire" (fannyonfire.com) and "Secrets of Successful Inventing." She has written for *Inventors Digest* since 2000. Edie has owned EGT Global Trading since 1997, assisting inventors with product safety issues and China manufacturing.



The mother and inventor has a co-founder—her father, Stan Valiulis.

EGT: Do you have any advice for our readers who might be interested in developing a new product for babies?

2 Critical Steps to getting your NEW PRODUCT "out there"

1 GET IT MADE

Contact Edie Tolchin – "The Sourcing Lady" (SM) for sourcing, China manufacturing, product safety issues, packaging assistance, quality control, production testing, final shipment inspections, freight arrangements, import services and delivery to your door!

www.EGTglobaltrading.com

EGT@egtglobaltrading.com

P.O. Box 5660 - Hillsborough, NJ 08844

845-321-2362

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EXPLORE OPTIONS TO LICENSING

Many inventors believe they can license their invention to a large company, then collect royalties. In reality, only about 5 percent of patents ever go commercial, and fewer than 1 percent generate at least \$1 million for the patent holder. The only surefire way to get your invention into a retail store and control your profits is to sell it and manufacture it! Here are five secrets to tilt the balance in your favor:

1 As long as your invention is priced right, will fit on a retail shelf, and has packaging that “sells it,” you have a great chance of getting in stores.

2 You can hire sales representative groups to do the selling...and the best part is they work on commission only, so they don't get paid until you get paid. So, you can have hundreds of people out selling your invention around the country. Your role is to help them see why retailers need your invention on the retail shelf: Give them sales tools (sell sheets or catalogs) to use when they meet with their retail customers. There are two kinds of reps—those who work with independent

etc., local retailers and those who specialize in large retail chains. Distributors or reps service every retailer in the country.

3 Sourcing manufacturing has become as easy as checking a website. Alibaba is a vast network of manufacturers who can work with you to build prototypes, samples and then manufacture your invention. The digital age has made it much easier to work with a resource in another country to manufacture your goods. If you source in the United States, add that to your packaging as a selling point.

4 You don't need to manufacture your invention before you sell it. You can wait for retailers to make commitments on quantities and timing. When you get an order from a national chain, you'll have months to produce and ship to them. Independent retail customers may want product right away.

5 Learning the process of manufacturing and selling is exciting! There's still nothing more rewarding than walking into a store and seeing your invention on a store shelf.

Consumer Goods Growth Strategist Cathy Parks, creator of the PARKS Method, helped Barbie become a billion-dollar megabrand and now helps inventors and emerging brands successfully sell to retail stores.

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RAISING EYEBROWS

RECENT U.S. MICROBLADING CRAZE IS INNOVATION GOLD FOR CELEBRITY ARTIST SHEILA BELLA **BY REID CREAGER**

IN JUST THE PAST FEW YEARS, the ancient process of permanent makeup has been getting a face-lift in the United States.

Microblading eyebrows, a semi-permanent tattooing technique in which pigment is deposited into the skin, began gaining popularity in the mid-1990s in Asia before recently exploding across Europe. Today, YouTube teems with tutorials and myriad styles from ambitious amateurs, polished professionals, and people who should not be cutting paper with rounded scissors.

So it seems fitting that one of America's most widely known and respected practitioners of the art was born in Quezon City, Philippines.

Sheila Bella—mother, artist, entrepreneur, innovator, motivator and self-described part teenager—is among America's microblading pioneers, having performed thousands of procedures and trained all of her artists as founder and certified lead artist of Sheila Bella Microblading in North Hollywood.

"I was one of the first people to do microblading on celebrities and models in Los Angeles and other places across the United States, introducing it to this region of the world," says the effervescent mother of two with a third on the way. "Permanent makeup was outdated and unnatural looking, but learning microblading took it to the next level.

"How many cosmetic procedures can you name that have been around in the United States for such a short time? It is a baby in terms of cosmetic treatments. It has a long way to go."

It's in the pattern

Eyebrow tattooing. Feathering or feather tattooing. Microstroking. The Japanese Method. 3D eyebrow embroidery.

They all involve essentially the same goal as microblading, in which a fine, pen-like tool with 12-15 tiny needles is used to cut the skin in a hair-shaped line. The line, or "stroke," is then filled with ink to form a row of hairs that simulate real eyebrow hair.

With numerous celebrity clients, the certified lead artist of Sheila Bella Microblading in North Hollywood, California, says microblading has taken permanent makeup to "the next level."



Many artists have crossed hairstrokes in an X pattern to replicate how real-life hairs cross. But this can injure the skin and end up looking less natural.

Bella says it is essential for an artist to recognize and follow an individual's hair pattern.

"Back in the day, PMU (personal makeup) was done with a machine and a very unnatural picket fence pattern. I myself had gotten it done this way long ago.

"Microblading follows more natural hair patterns. Not everybody has the same hair pattern.

"Hair patterns are like snowflakes and fingerprints. You can't just learn one and stamp that on every client who comes in. Our unique hand tool provides a specific form of the needles that allow artists to create the look of fine brow hairs on the skin."

The actual blading follows a detailed consultation and preparation process with clients—who have included Meagan Good, Abigail Ratchford, Simone Biles, Chloe Terrae, Tianna Gregory and Paige Hathaway among many other celebrities.



SHEILA BELLA

BORN:
Quezon City,
Philippines

HOME:
Los Angeles

EDUCATION:
Granada Hills (Calif.) Charter
High School, Class of 2000

HOBBIES:
Singing, musical theater

FAMILY:
Husband Will,
children Beau (6),
Grey (4)

FAVORITE MOVIES:
"The Greatest Showman,"
"Legally Blonde,"
"Mean Girls," "Aladdin,"
"Dreamgirls"

MOST INSPIRATIONAL QUOTE:
"If you can't beat fear, just do it scared."

“When clients have their eyebrows done first, we consult to see what style and shape they desire,” says the woman with 15 years’ experience as a professional makeup artist for leading brands including Chanel, Lancôme, Benefit and Clinique.

“Next is the design process, where the artist will design the eyebrows with a pencil to preview what the tattoo will look like. Once the shape and color have been pre-selected and approved by both the client and artist, the numbing process begins.

“We use topical numbing to ensure the comfort of our clients.

The entire process from beginning to end takes about 2 1/2 to 3 hours.

And the healing process is about two weeks in total. Keep in mind that permanent makeup is a two-session procedure in most cases.”

Determination in the genes

Whether talking about her business or herself, Miss Philippines USA 2004 exudes charisma and

easy candor that put people around her at ease.

“I feel like I am 17 years old half the time,” she says. “I wake up in the morning and think, ‘Why am I in charge of these people, and who am I to be running a multi seven-figure business?’

“Not only that, I know I look like someone you typically wouldn’t be able to take seriously as a businesswoman. My makeup is at least an inch thick! I wear gaudy, sparkly jewelry and clothes only little girls like.

“If anything, success has helped me be more comfortable looking and dressing the way I have always wanted to, but sometimes I was too afraid to because I thought it would hinder my success.

“The universe will bend if you stand up to it. Ask for what you want, and don’t take no for an answer.”

The determination is in her genes. After moving to America at 8, she grew up in a family of 10 as her parents provided for their kids “through strategy and grit.”

The semi-permanent tattooing technique, in which pigment is deposited into the skin, began gaining popularity in the mid-1990s in Asia before recently exploding across Europe.





“The universe will bend if you stand up to it. Ask for what you want, and don’t take no for an answer.” —SHEILA BELLA

That sturdy work ethic resulted in her starting her own company as a young adult. Platinum Vocals Inc., a children’s performing arts school, helped propel young artists with no experience to stardom. But in 2009, she left a bad relationship and decided to reinvent herself.

She dabbled in modeling, acting and singing while seeking her perfect career fit. There were setbacks and hard times.

As she says on her website: “I don’t come from money. I’m not married to money. ... My last job was waiting tables in a schoolgirl outfit at Dillon’s Irish Pub serving avocado fries” before meeting her husband, Will.

Her priorities changed, including a stable career.

She decided to be a permanent makeup eyebrow artist, eventually becoming one of the first microbladers in Los Angeles after teaching herself on Google and through mentors and online courses. She literally did the legwork to build her brand.

“I remember getting dressed to the nines as if my calendar was full. My face beat was serious.

I marched up and down Ventura Boulevard, passing out my brochures at hair salons and medi-spas asking owners if I could leave my brochures in their waiting areas. ...

“When the phone started ringing for appointments, I pretended to be my own receptionist and answered in the most professional voice I could muster. ... I also didn’t have money for a web designer, so I spent three weeks locked in my apartment learning coding from YouTube and building my website. ... There wasn’t a Chamber of Commerce breakfast meeting I didn’t do ...

“When people asked me to showcase my product, I spoke with the confidence of a seasoned pro. Why? Because I had to. To me, failure just wasn’t an option.”

Her company opened in 2011. It has served about 11,000 clients, now has more than 25 employees and makes over \$1 million in revenue each year while helping people.

Among the company’s registered trademarks are “Live Life Beautiful” and “Pretty Rich”—the latter her program to help creative beauty artists seeking business and marketing guidance.



The greatest reward

As with many innovators, Sheila Bella saw an emerging existing invention or trend and put her own personal stamp on it. For her, a relaxing environment is essential.

“Listen, you can get high-quality PMU nowadays from a lot of artists. But Sheila Bella Microblading is an oasis for women that leaves you feeling like you just hung out with your best gal pal for a few hours. Our mission is to send every woman off feeling more beautiful and more empowered to conquer the world.”

This can include women who lost their eyebrows from chemotherapy or who have general hair loss. When she sees their

post-procedure expressions of sheer delight, she knows she chose the right career.

“It is so much more than just eyebrows to a lot of people. This is something that many people outside of the industry may not understand.

“There is nothing like the look on your client’s face after she looks in the mirror, her face wet with tears of joy because your hands have restored the appearance of youth or, in some situations, health.

“Think about that for a second! It is an honor and a privilege to be able to do that for somebody else with your hands.” 📌

Details: sheilabellamakeup.com

The four main steps in Sheila Bella’s microblading process: Research; plan the shape; draw on the face; the final tattoo.

SAVING FACE GOES WAY BACK

Who invented permanent makeup?

Determining that would be almost as difficult as microblading Jack McCoy’s eyebrows. Archaeologists have found physical evidence of permanent makeup being used as long ago as 5000 B.C.

Suffice it to say that the process is ancient throughout many parts of the world. According to pmuinternational.com, Stone Age people made flower ornaments, animal elements and various symbols on their faces; tattooed mummies dating back more than 4,000 years were found in Egypt; Chinese people were using different

tattooing techniques starting around 1000 BC. The first mention of PMU is circa Cleopatra’s reign (51 BC–30 BC).

Quick search engine checks show that the first documented permanent makeup treatment was by famous U.K. tattoo artist Sutherland MacDonald in 1902 at his London parlor—an “all-year-round delicate pink complexion” on the cheeks.

But many sources say that in 1891, a New York man with the last name of O’Reilly invented an electric tattooing machine, and that U.S. surgeon Crowell Byrd performed the first-ever tattooing with the machine.



PART 1 OF 2: ELECTRIC MOTORS

See How They Run

HOW MOTOR TECHNOLOGY EVOLVED OVER TWO CENTURIES, AND HOW IT WORKS TO DRIVE MODERN LIFE **BY JEREMY LOSAW**

THE GROWING POPULARITY of electric vehicles has thrust electric motors into the spotlight, but it is a tale more than two centuries in the making.

The roots of electric motor technology date to the early 1800s and the foundational research around electromagnetism. Through generations of design and innovation, electric motors have been developed to be one of the most highly efficient power transmission devices and a key component in industrial and consumer devices.

Often shrouded under the cloak of an electric car body or the housing of a consumer product, electric motors have emerged as a hidden hero that we use in our everyday lives.

In this two-part series on electric motors, I will discuss the history and fundamentals of electric motor technology before exploring practical applications and prototyping techniques in Part 2.

History

The history of electric motors parallels that of the development of electricity.

The late 1700s and early 1800s brought about dramatic innovations in electricity, such as Alessandro Volta's invention of the battery and Georg Ohm's work that described some of the first mathematical descriptions of electricity. However, it was Hans Christian Ørsted who unlocked the relationship between electricity and magnetism.

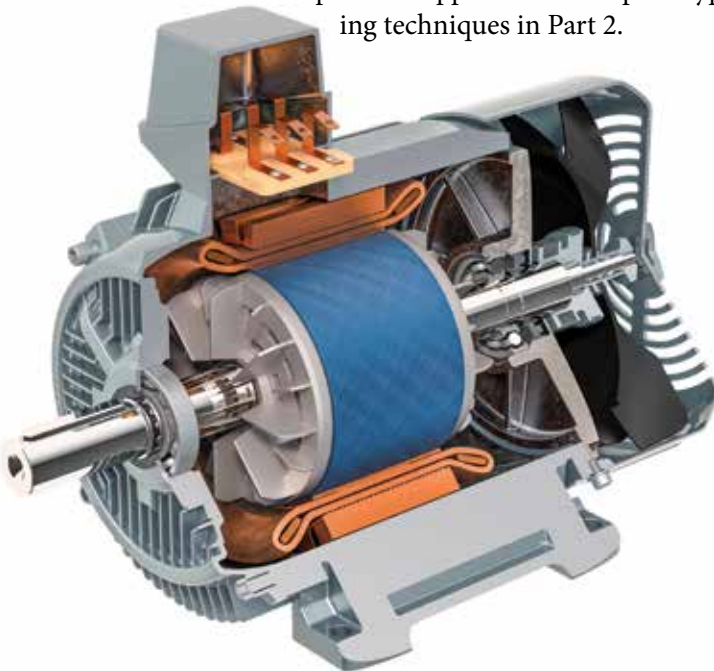
In 1820, he observed that a compass needle moved when in the presence of an electrified rod. This concept became the foundation of electric locomotion.

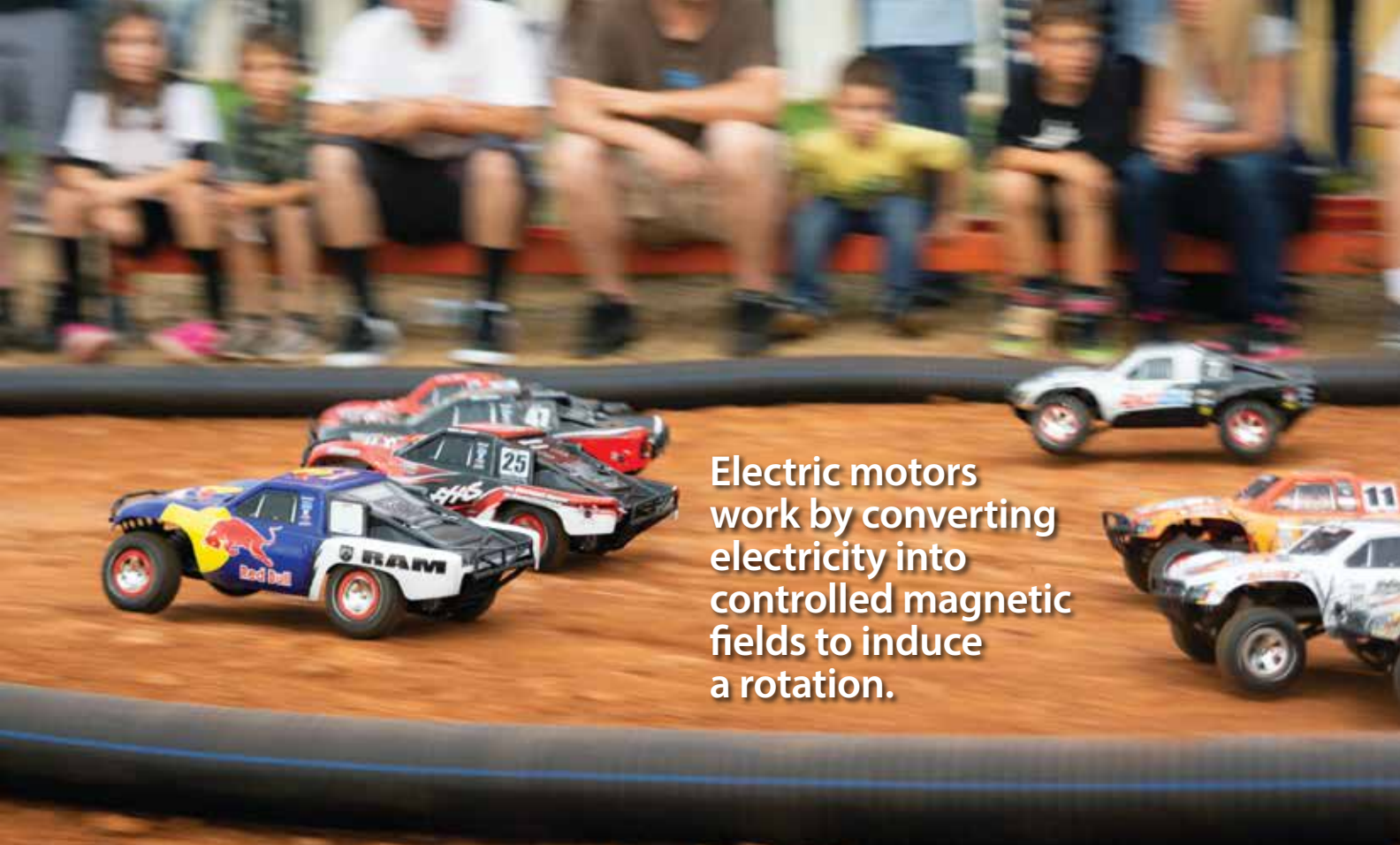
Further innovations followed quickly: English physicist William Sturgeon developed the first motor that could power industrial machines; Americans Thomas and Emily Davenport were granted the first electric motor patent in 1837. These early motors were commutator-, or brushed-style motors that necessitated a physical connection between the rotating armature and the magnetic stator (the stationary portion of an electric generator or motor).

In the late 1800s, as Thomas Edison and others were working out the details of electric lighting, Nikola Tesla and Galileo Ferraris were independently developing brushless, or induction, alternating current (AC) motors. This technology unlocked the power of electric motors for widespread uses. Soon after they became a staple of industrial products, powering anything from cable cars to mining equipment while replacing human, water and animal power.

Over time, electric motor technology advanced to the point it is today to efficiently power cars, consumer goods and industrial applications of all types.

The industrial electric motor dates to the 1800s.





Electric motors work by converting electricity into controlled magnetic fields to induce a rotation.

How they work

Electric motors work by converting electricity into controlled magnetic fields to induce a rotation. The two main ingredients that make up all electric motors are the magnet and electric coil.

The coil is wound in such a way that when power is applied to it, it creates a magnetic field, which is also called an electromagnet. In magnets, opposite poles attract each other and so when the coils are energized, the fixed magnet tries to align itself (north pole to south pole) and find its equilibrium.

This action of the magnet and electromagnet trying to pull themselves into alignment induces the axle or rotor of the motor to move. If the electric field switches before the system equilibrates, the shaft of the motor will continue to spin to try to align to the new state of the electromagnetic poles. If this is done fast enough, the motor will spin continuously in its never-ending attempt to find its elusive equilibrium until the power is cut.

The two broad types of electric motors are brushed and brushless. A motor falls into one of these categories based on the arrangement of the magnets and the coils.

All electric motors have a rotor and a stator. Predictably, the stator is the housing that stays stationary and the rotor is the part that rotates. The magnets or the coils can be on either the rotor or the stator.

Brushed motors have the magnets in the stator and the coils are on the rotor; therefore, they also require conductive brushes that are mechanically and electrically in contact with the rotor to provide electricity to the coils while still allowing the rotor to spin. Brushless motors have the magnets on the rotor and the coils in the stator. The magnetic field is created by the coils in the stator and induces the magnets on the rotor to move without the need for brushes.

Brushed motors tend to have more startup torque and are easier to control. However, the brushes increase the drag on the rotor; plus, they have lower top speed and slow down faster when the power is cut. Also, brushes are a consumable that need to be replaced when they wear out. They can be powered directly from a battery or a wall wart (AC to DC wall converter) but require a controller if variable speeds are required.

Brushless motors have lower startup torque but high RPM and need very little maintenance.

Before electric motors were commercially viable for full-scale cars, they were used to power remote-control cars like these.

Classifieds

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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,
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confidentiality agreement is a standard part of our working
relationship. For details, see my web page:

www.Inventor-mentor.com

Best wishes, Jack Lander

They cannot be run directly from wall power
without intermediate circuitry or a controller
to dose out electricity to the coils in the right
way to keep the rotor spinning.

Applications

Electric motors are used in devices from cell
phones to freight trains and seemingly every-
thing in between. Motors are all around us in
our homes. The vast majority of us unknowingly
carry around one or more with us all day long,
as there are tiny haptic motors inside wearables
and cell phones that buzz us when we get a call
or reach our step goals.

The vast majority of us unknowingly carry around one or more motors with us all day long.

In our kitchens, motors run inside blenders
and other cooking tools; rotate the turntables
inside of microwaves; and pump coolant in our
refrigerators to keep our food cold. Motors inside
our computers spin disk drives and provide cool-
ing air to keep them running properly.

Motors are ubiquitous in our tools, too. Drills,
grinders, sanders, saws and even 3D printers use
electrical motors to help us get our jobs done.
There are also myriad applications in industrial
and medical devices that provide us with the
products and services we need and desire.

While often hidden from view, cloaked by an
aesthetic housing or mounted deep inside the
guts of a machine, electric motors are integral
to modern life.

In Part 2, I will explore some different types
of motors and how they can be used to bring
prototypes to life. ☛

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/.



The Best Teammates

WHEN GETTING HELP DURING THE INVENTION PROCESS, LOOK FOR THESE PEOPLE AND SERVICES **BY DON DEBELAK**



WHEN PERFORMING the many functions needed for a successful invention, you may need more people (and the right people) than you think.

Inventors typically have some but not all of the skills needed to launch their product. Consider the help you need:

- **Someone who understands the needs of the end user.** Inventors often observe a need in others, such as an inventor who notices that a spouse struggles getting items off the top shelf of a cabinet. In these cases, inventors often assume they understand the needs of end users. But inventors rarely understand all the issues when they are not an end user.
- **Someone who can do product design and engineering drawings.** This allows you to take rough drawings and turn them into professional looking materials. These drawings help you appear professional to a manufacturer and can cut down on patent expenses. Plus, the engineering help will often reveal flaws in your product design or come up with improved ways to produce your product. If you can't afford product design firms, consider sites such as Upwork, Fiverr, Toptal, or Crewscale.
- **Small business startup assistance.** Most inventors don't know if they should be a sole proprietorship, LLC or corporation. Try a Small Business Development Center, located around the country and sponsored by the Office of Small Business Development Centers: sba.gov/offices/headquarters/osbdc
- **Patent assistance.** Before going to a patent attorney or patent agent, you can learn a lot about patent basics from the United States Patent and Trademark Office website. Check out uspto.gov/patents/basics and the

USPTO's Inventors Assistance Center. Or try a local inventors club.

- **Prototype help.** There are many advantages to making a prototype. It will help you work out design flaws, cut your set-up and design costs when you go for a license, dramatically improve your chances of getting a license deal, and can help you raise money either from investors or from a crowdfunding platform. You might be able to make a prototype at a library with 3D printers.
- **Social media help.** Facebook groups are great sites for market research and focus on your project, as well as a good spot to start selling your product. In addition, if you are doing a crowdfunding campaign, you need to know how to work social media to generate interest in your product to build momentum for the fundraising. Social media groups also can help you find representatives and retailers.
- **Manufacturing interface.** Find a quality control engineer or a production engineer who can protect your interests. Your inventors club might have someone, or you can use sites such as Upwork to find a freelance engineer.
- **Sales and marketing help.** LinkedIn is a good source for finding experienced people in a certain market. That said, I recommend someone with social media experience to find someone in a social media group. ☺

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



The Art of the Newsjack

MARKET YOUR INVENTION THROUGH PR THAT TIES IN WITH CURRENT EVENTS **BY ALYSON DUTCH**

MANY PEOPLE know that a lumberjack is a fashion inspiration for men's flannel shirts, and the flapjack is a Sunday morning favorite with a good cup 'o Joe. But if you're an entrepreneur and you've never heard of a newsjack, it's worth exploring.

In April, the members of the Academy of Motion Picture Arts and Sciences graced the film "Sound of Metal" with six Oscar nominations. The movie, about a rock 'n' roll drummer who loses his hearing, was a reason to connect Fardad Zabetian's (*Inventors Digest* cover story, April 2021) multilingual SaaS KUDO video-conferencing that features a drop-down menu of 147 sign languages to news stories after the Oscar telecast.

So before the Sunday cultural celebration, our company prepared a pitch featuring a list of "did you know" factoids about how many Americans and global citizens are deaf, how many sign languages there are in the world, and how KUDO was helping to change the face of global business for deaf people. We sent it to all the journalists who write about global business and to the entertainment press we knew would be covering the Oscars.

What happened?

One of the reporters I know who does entertainment reporting for the Los Angeles NBC-TV station wrote back, thanking us for facts he could use in his pre- and post-Oscar reporting. He then introduced me to Marlee Marlin's executive producer. For those of you who don't know, she's a famous deaf actress who was on the Oscar telecast signing for all the "Sound of Metal" nominations.

It turned out that KUDO was looking for a community leader to expand its sign language

services, so we were pleased to connect the company with Marlee.

That's called a newsjack!

Commercial vs. newsworthy

Newsjacking.com defines the process as "the art and science of injecting your ideas into a breaking news story so you and your ideas get noticed." In 2017, newsjacking was one of Oxford Dictionaries' "Words of the Year."

Good newsjacking begins with understanding what's newsworthy—and what's not.

A product is a commercial entity, something the press will not naturally report about because it is, well, not a story.

To a reporter, a product is something that should be marketed with advertising (read: banner ads, TV, radio, influencer buys—placements that are guaranteed because you pay for them). But when you find something in the news as a tie-in, that is when your product becomes relevant and reportable in an unbiased, objective way.

If you do not have a budget for a PR agency, learning how to do this is probably some of the best advice I could give you. If you have budgeted for an agency, now you know how to interview to find the right one. Great publicists will always be looking for things in the news that make your product or invention reportable.

Keep up with the news

Here's another example.

For a company called Beam (formerly Envision Solar, led by November 2019 *Inventors Digest* cover subject Desmond Wheatley, which makes solar-powered EV chargers), one of the most important pieces of marketing now is the

Great publicists will always be looking for things in the news that make your product or invention reportable.

fact that the Biden Administration is focused on clean energy initiatives. In fact, the White House has been specifically and publicly talking about supporting EV charging technology.

When Beam connects its product to this initiative, every bit of marketing it does—from sales to publicity—is provided with the borrowed credibility of presidential preference. For the press, Beam's products are suddenly natural to include in its reporting.

Now, that is powerful (pardon the pun).

As product launch specialists, our company works with entrepreneurs. For the companies we introduce to our little black book of reporters through a matchmaking service we call Consumer Product Events, we help them to newswatch their products before we make those introductions.

The best way to find newswatches is, of course, to read the news. The larger story it is, the better chance you have of tying it together in a way that's truly newsworthy.

What if you don't fit?

What if your product does not fit into these larger news stories?

Start looking for holidays, and what I call “months du jour.” Examples of this might be that you make ties or cufflinks, which are traditional Father's Day gifts, so June Dad's Day gift guides make it newsworthy.

If you make sparkling wine, champagne, Italian prosecco or a brachetto, New Year's celebrations are the No. 1 newsworthy time for that type of product, followed by Christmas and Thanksgiving.

It may be that you make a handmade luxury ceramic pet dish, so National Pet Month in May is a time to be looking for publicity. You

sweeten the publicity angle with anything cause-related, so if you connect your pet dish product to the Guide Dog Foundation to raise money for it, as Kym Gold (January 2021 *Inventors Digest* cover) of Style Union Home did, you're off to a great start!

Another way to create a newswatch is to look for studies, trends and statistics that make it relevant.

For a client who made a product called Pillpanion that organized pills for elderly people, our company suggested that she find statistics about the dangers of elderly people accidentally overmedicating. We bolstered that story by finding statistics about how many older people there are in the United States and how overwhelming of an issue it could become.

Maybe the best way to know whether something is newsworthy is to notice what is being talked about—which includes hashtags on social media.

Newsjacking is an important skill to master. Learn it. Do it. Become an instant master publicist. 📢

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



The Design Patent: What it Is, and Isn't

IT'S THE PERFECT TOOL AT TIMES, BUT KNOW THESE IMPORTANT LIMITATIONS **BY GENE QUINN**

YOU HAVE probably heard of a company called Apple. It sells computers, watches, tablets and all kinds of accessories. You have probably also heard that Apple was engaged in a patent war with Samsung Electronics, which was fought all over the world and finally resolved after many years of litigation.

What you might not be familiar with is the fact that, in the United States, it was not Apple's utility patent portfolio that was found infringed by Samsung. Apple had to rely on design patents to prevail over Samsung.

If design patents are powerful enough for Apple to use to prevail over Samsung, it makes sense that anyone who has a unique visual presentation for a product should consider whether adding design protection to his or her portfolio is a wise decision—which it probably is.

Of course, it is important to understand what one is obtaining. And though design patents are the perfect tool in the toolbox at certain times—such as when a temporary restraining order is desirable against an infringing competitor showing off a knockoff at a trade show—they are a specialty tool that you will want in your toolbox for the right occasion.

Know your rights

Notwithstanding the reasons to consider a design patent, it is essential to understand which rights are realized with a design patent and to understand the limitations of design patents themselves. One big limitation is that design patents do not protect an idea any more than a utility patent protects an idea. Ideas are not something that can be protected by any form of intellectual property.

Similarly, a design patent does not protect an invention—at least not how inventors and patent attorneys typically think about an invention. Rather, a design patent only protects the ornamental design of exactly what is pictured.



A design patent does not protect an invention, only the ornamental design of exactly what is pictured.

A design patent focuses on the exterior, not the interior, and certainly not the function. This is why many patent professionals refer to a design patent as a “picture patent.” Referring to a design patent that way is helpful when understanding the limits of the protection because designs are all about the drawings, and little (if anything) other than what is explicitly shown in the design drawing is covered by an issued design patent.

Maximize protection

Although the test for infringement is based on an ordinary observer, different looks should be considered to require different design patents to protect variations. In other words, if there are alternative visual presentations possible, a single design patent would not protect both unless they are very similar (i.e., close to identical with only very subtle variation). It is best to assume that each unique variation, no matter how slight, should be covered in its own design patent application.

It is also essential to understand that design patents protect only the way something looks, not the way it operates. To protect the function, structure, operation and interior workings of an invention, consider filing either a provisional patent application or a non-provisional patent application in conjunction with a design patent.

This doesn’t mean design patents aren’t valuable; they are. But when utility protection is available, a portfolio made up of only design patents would be wholly unsatisfactory. A proper mix of utility protection and design protection is ideal. ☞

Gene Quinn is a patent attorney, founder of IPWatchdog.com and a principal lecturer in the top patent bar review course in the nation. Strategic patent consulting, patent application drafting and patent prosecution are his specialties. Quinn also works with independent inventors and start-up businesses in the technology field.



10 KEY REMINDERS

Final thoughts on design patents:

1. Although weaker than utility patents, design patents give you the ability to use the coveted terms “patent pending” and “patent issued,” as is appropriate.
2. Design patent applications are heavily leveraged on patent drawings. You cannot skimp on professional patent illustrations; they are EVERYTHING to a design patent application.
3. For newly filed design patent applications the term is 15 years, and once the design patent has issued there are no other financial obligations necessary to keep the design patent pending for the full 15-year term. This is different than when dealing with utility patents; these have increasing maintenance fees due at 3.5, 7.5 and 11.5 years after issuance in order to keep the

utility patent alive and out of the public domain.

4. Design patent applications include only a single claim. Utility patent applications can have multiple claims.
5. Restriction between multiple, distinct inventions is discretionary on the part of the examiner in utility patent applications, but it is mandatory in design patent applications. This means if you have more than one design, you will almost certainly require multiple design applications unless the variation is quite small.
6. Foreign priority can be claimed for the filing of utility patent applications up to a year after the first filing in any country subscribing to the Paris Convention, but this period is only 6 months for design patent applications.

7. Utility patent applications may claim the benefit of a provisional application for up to 12 months, but design patent applications may not claim priority to a provisional patent application.
8. A Request for Continued Examination (RCE) may only be filed in utility and plant applications. RCE is not available for design applications.
9. A continued prosecution application (CPA) is available for design applications (and not for utility applications). Functionally, an RCE and CPA are quite similar from the applicant’s perspective.
10. Utility patent applications filed on or after November 29, 2000, are subject to publication, but design applications are not published.





Seeing the Whole Forest

LANDSCAPE STUDIES HELP BUSINESSES AVOID SPENDING SCARCE RESOURCES AND IDENTIFY PATENT OPPORTUNITIES

BY LOUIS CARBONNEAU

WE HAVE now reached a delicate juncture where the world is rapidly diverging down two roads: countries where the COVID landscape is improving (United States, some Asian countries, Israel, Australia, New Zealand, etc.) and those that are deteriorating before our eyes like India and Brazil as new variants are winning the race against vaccine deployment rates.

Thus far, those vaccines have proven to be effective at much higher rates than initially touted (closer to 99 percent efficacy).

We now have enough available data to see the forest through the trees; there should be no excuse to remain part of the problem.

Having the full picture of a situation generally allows for proper planning and decision making. Too frequently, raw data can be overwhelming—noise in many cases—that prevents us from viewing the buildable landscape. You would not build a flat house on a steep hillside, right?

Do you have a clear understanding of the intellectual property landscape surrounding your technology—including the key players, industry growth projections, technology trends and what the main patent owners in your space are doing?

Before engaging in new R&D, design projects or exploring new tech verticals, every business must understand its position in the surrounding IP landscape and its “invention gap.”

This strategic business intelligence allows businesses to avoid spending scarce resources reinventing the wheel while also identifying “white space” opportunities from a patent perspective. These “white spaces” create long-term leverage through broad IP protection that can later be used as a deterrent, a bargaining chip against competitors, or as a valuable asset to convert into cash via a sale or licensing program.

Your private library

Think of all the intelligence failures where it turned out the information was available in theory, but no one could see it hidden under the pile. September 11, anyone?

Now visualize a landscape study as your own presidential briefing, informing you on threats and opportunities, without getting bogged down in the minutia that sometimes masks the most important pieces of information.

Or, if presidential briefings aren't your taste, consider a landscape study as your own private

Before engaging in new R&D, design projects or exploring new tech verticals, every business must understand its position in the surrounding IP landscape and its “invention gap.”

library in your relevant technical domain. Precious highlights include: who is doing what; what kind of R&D activities your competitors are focusing on; how it translates into enforceable IP rights; what this means for your company; where you can get the most bang for every buck you spend in research and development, and understanding the technology areas where the same patent you file for instance will have much more strategic value.

It is never too late to conduct such a landscape study, and it is never too early, either!

When I was at Microsoft, we would systematically conduct such a landscape analysis before entering a new market segment, especially when more vulnerable from an IP standpoint. This allowed us to understand early in the process who was leading the field, who was losing steam, identify potential players to partner with or to acquire, who could come after us with their patents and how to preempt this, or at least have something to throw back at them should they do so.

But you do not have to be a Fortune 500 company to benefit from this. Even startups can greatly benefit from such information.

For instance, at Tangible IP we routinely conduct such projects for smaller organizations where they extract a ton of value from the report we provide. With precious few dollars to spend on R&D and IP creation, they cannot afford to lose any or spend energies on the wrong projects.

Providing crucial tools

A well-conducted landscape study examines hundreds and sometimes thousands of patents (issued and pending), as well as all non-patent literature worldwide. This provides a comprehensive set of documents and analysis that puts business owners back in the driver's seat, giving them the tools to make educated decisions based on real data such as areas of intense patenting activities, current trends and key players.

They also provide fantastic data for current and future patent filings by drilling down to the core novel elements of an invention while providing meaningful background to patent examiners. These elements are often considered the basis for developing a stronger and more strategic patent portfolio.

You see all those trees over there in the landscape? You are looking at the forest now! 🌲

Louis Carbonneau is the founder & CEO of Tangible IP, a leading IP strategic advisory and patent brokerage firm, with more than 2,500 patents sold. He is also an attorney who has been voted as one of the world's leading IP strategists for the past seven years. He writes a regular column read by more than 12,000 IP professionals.



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Iancu Blasts Waiver

U.S. DECISION TO IGNORE COVID-RELATED PATENT RIGHTS
'DANGEROUS ... FOR MANY REASONS' **BY GENE QUINN**

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

"PROPERTY RIGHTS are not just good for the economy. They save lives."

Americans for Tax Reform President Grover Norquist, making that comment on World IP Day April 26, also mentioned "the damage that would be done if some of the critics of intellectual property have their way."

Norquist was implicitly referring to the IP waiver proposal by South Africa and India that would allow nations to ignore patent rights relating to COVID-19 related innovations, particularly vaccines. Nine days later, President Joe Biden announced the United States agreed to the waiver.

Former United States Patent and Trademark Office Director Andrei Iancu, also speaking on World IP Day, called the waiver "A dangerous proposal for many reasons.

"One, it is dangerous to innovation," said Iancu, now senior adviser to the Renewing America Innovation Project at the Center for Strategic and International Studies "More importantly, the waiver imposes an immediate danger to widespread dissemination of the vaccine."

Iancu, responding to a question from the audience, explained that large and small companies are collaborating and cited India—which is going to make 1 billion doses of the vaccine—as an example of success. Such a large dose of the vaccine would make India second only to the United States.

"If you remove IP, companies are going to retreat into their trade secret shells and be less likely to collaborate," Iancu explained. His culminating point related to his desire to ensure policies are adopted to ensure the world is prepared for the next pandemic.

Furthermore, "if we waive IP rights and exclude the original manufacturers, how are we going to control the quality of the vaccines that go into people's arms? How are we going to control for the fake vaccines? Just last

"It is dangerous to innovation (and) imposes an immediate danger to widespread dissemination of the vaccine."

—ANDREI IANCU

week we saw fake Pfizer vaccines," Iancu said with emphasis.

"The system is working well. We have already deployed 1 billion shots; by the end of May it will be 2 billion; by the end of the year it will be 9 to 10 billion shots, enough to vaccinate all adults around the world ... the system is working. Let it work for its intended purposes."

SMEs a growing factor

The theme for World IP Day this year related to the importance of IP for SMEs (small and medium enterprises). They make up 90 percent of

the world's businesses, according to Philippe Baechtold, WIPO senior director, PCT Services.

SMEs are more likely to achieve high growth in subsequent years. SMEs with intellectual property rights have 68 percent higher revenue than those that do not own any form of intellectual property rights. SMEs that own a combination of patents, trademarks and design rights generate double the revenue than companies that do not own any IP rights.

Unfortunately, "fewer than 9 percent of SMEs in Europe own any type of IP rights," Baechtold said.

Iancu used his primary presentation to tell a story about two engineers who, in the mid-1990s in the prime of their careers, decided to strike out on their own.

They left great jobs, depleted their savings, and with good ideas received several patents. "TiVo changed the way we watched television," Iancu said as he revealed the company he was discussing.

The issue for TiVo, Iancu explained, was that big cable and satellite companies decided they did not want to work with TiVo. When pressed by their customers to incorporate the innovative features included in TiVo products, they decided to copy rather than license.

Luckily TiVo had patents, was able to get injunctions and ultimately got nearly \$2 billion.

"What would TiVo have done without patents?" Iancu said. "Patents are critical from an economics point of view." 🐶

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IoT Corner

Microsoft researchers recently uncovered at least two dozen crucial remote code vulnerabilities in IoT devices that could affect many consumer and medical devices, as well as industrial control systems.

Called **BadAlloc**, these vulnerabilities are related to the memory functions used in the deployment of connected devices. Though no reports of hackers exploiting the problem have been found, the results may have been severe because there was the potential to upload code to devices to trigger a crash or to run code for hostile ends.

More than half of the affected devices have been updated with software patches to prevent potential issues with others soon to follow. —*Jeremy Losaw*

Wunderkinds

Nine-year-old **Cooper Dean** of Valrico, Florida, was the Best Game Concept winner in the juniors category during the most recent People of Play's Young Inventor Challenge. Her inspiration was watching chickens make, uh, deposits while she was camping. In her Chicken Poo Bingo game, a windup chicken she got in an Easter basket is filled with miniature candy that it "pooops out," one by one, onto a master bingo board as players try to fill up the squares on their card. The winner gets candy.



What IS that?

The **WildWave Stress Relief Human Face Ball** is a four-piece set with different types of faces. Its makers say "You can pinch, press, throw, hurl, knock, trample this face ball" but warns against pulling pieces such as the nose or lip too strongly because you could pull them off. Maybe that's why there are four of them.

266 The number of patents known to have been issued by the short-lived **Confederate Patent Office** through 1864 (a few more may have been issued in early 1865). An April 1865 fire while Richmond was burning destroyed virtually all the patents.

WHAT DO YOU KNOW?



1 In an "All in the Family" episode, Archie Bunker spent \$1,000 to co-invest in a friend's invention of a:

- A) Foldable fishing pole
- B) Radar-controlled bowling ball
- C) Doorbell remote control
- D) Human subway shield

2 Which major U.S. presidential candidate applied to trademark the word "telerally" last year—Joe Biden, or Donald Trump?

3 True or false: Patents are valid only within a country.

4 Intellectual property specialist IPwe is partnering with which company's blockchain group to try to turn patents and other assets into non-fungible tokens (digital assets)?

- A) IBM B) Sony C) Apple D) None of the above

5 True or false: The NFL has trademarked the phrase "The big game."

ANSWERS: 1. C. 2. Trump. Gerben Intellectual Property reported that the attempt was rejected by the United States Patent and Trademark Office on October 31 because it was not specific enough. 3. True. Patents are not valid worldwide. 4. A. IPwe announced its intention on April 20. The companies said, "The tokenization of intellectual property will help position patents to be more easily sold, traded, commercialized or otherwise monetized." 5. False—but seemingly just about everything else related to it.

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