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DIGEST

CRAZY BRILLANDEDICK'S

AARON MUDERICK'S PRODUCTS STRETCH OUR CURIOSITIES

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Trademark Basics в о о т с а м р

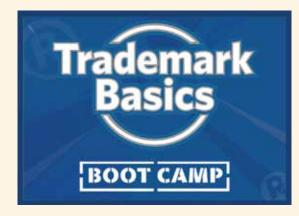
Starting back up on July 9!

The USPTO's Trademark Basics Bootcamp series provides a comprehensive overview of the process for federal trademark registration and maintaining a federal trademark. If you're a small business owner or entrepreneur seeking to protect your brand and product identities, Trademark Basics Boot Camp is for you.

You can attend the entire series or just the modules that best match your interests, but you must sign up for each module to attend. Visit our series page to learn more and sign up for individual modules.

Register at www.uspto.gov/about-us/events/ trademark-basics-boot-camp





July 9 Module 1: Fundamentals

July 16 Module 2: Registration process overview

July 23 Module 3: Searching

July 30 Module 4: Application requirements

August 6 Module 5: Application filing walk-through

August 13 Module 6: Responding to an office action

August 20 Module 7: Keeping your registration alive

August 27 Module 8: Question-and-answer panel

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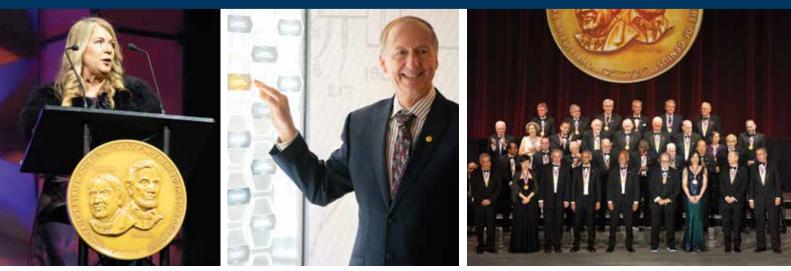
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Timeless Impacts

National Invention Hall of Fame Class of 2024 honored in Washington, D.C., ceremony

Kathi Vidal, undersecretary of commerce for intellectual property and director of the USPTO, delivers her remarks; Harald Hess, who co-invented a super-resolution imaging technology called photoactivated localization microscopy (PALM), points to his name at the Illumination Ceremony at the NIHF Museum; and inductees pose for a photo. n her National Inventors Hall of Fame[®] acceptance speech, Andrea Goldsmith honored the legacy of past inductees. Shankar Balasubramanian lauded the USPTO and its current, ongoing mission to encourage and enable intellectual property protection, particularly patents. And Asad Madni thanked future generations for inventions and innovation that will further transform the world.

The 15 2024 NIHF inductees were honored May 9 in Washington, D.C., at "The Greatest Celebration of American Innovation," in partnership with the USPTO. Their diverse speech themes were consistent with a wide range of inventions ranging from cancer treatments to theatrical technologies, and with a class that featured 11 men and four women—with six born outside the United States, and two African Americans.

The nine living and six historic inductees are among more than 600 NIHF recipients since its founding in 1973. Goldsmith, who created technical innovations including adaptive beamforming for multi-antenna Wi-Fi, is thrilled to be a part of that history.

"I am incredibly honored and deeply humbled to be inducted into the Inventors Hall of Fame," she said. "The previous and current inductees have changed the world with their ingenuity, their creativity, and their passion to turn their ideas into inventions that benefit the world and everyone in it.

"You are all my professional heroes and my inspiration."

The India-born Balasubramanian—who co-invented a revolutionary DNA sequencing method with U.K.-born David Klenerman talked about a different kind of hero.

"The patent examiners, the PTO—you are unsung heroes, actually. Without the endeavors of all you folk, our inventions wouldn't go anywhere. You play a critical role in that.

"Also, you share with us a genuine passion and curiosity, and a desire to make things work."

Of course, the road to a patent is part of a broader destination. James Allison, who invented immune checkpoint blockade therapy that is an effective treatment for cancer, said: "All of us have been recognized I think for what might be considered a milestone of our work, a patent that we got.

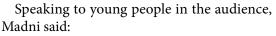
"That really is just part of the process—to me, at least—of doing science and trying to understand things and then bringing it to people to try to help." Lanny Smoot's way of trying to help is to "amaze and enchant people," he told CNN in January—shortly after the announcement of the 2024 class was made on his home turf: the Walt Disney Imagineering campus in Glendale, California. Smoot is an elite-level Disney Imagineer who specializes in theatrical technologies and special effects.

He had called his selection "a dream come true. For an inventor, this is the best thing you can do."

The only other Disney employee to make the NIHF was Walt Disney himself.

When Smoot realized this, "I got a lump in my throat," he said. "I became a little emotional. I thought, "The weight of that is real, right?"

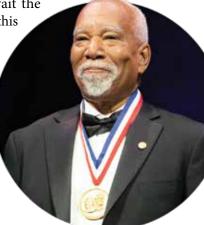
The night brimmed with excitement and anticipation, the latter on a grander level with regard to invention and innovation to come.



"We are looking forward anxiously to your imaginative and creative contributions in making this a better world for all," said the man who led the development and commercialization of the MEMS gyroscope.

"While the world awaits your contributions, we, your family at the National Inventors Hall of Fame, anxiously await the opportunity to honor you on this very stage."

Lanny Smoot called his selection "a dream come true. For an inventor, this is the best thing you can do."





- James Allison invented immune checkpoint blockade therapy, an effective treatment for cancer.
- Shankar Balasubramanian and David Klenerman co-invented sequencing-by-synthesis, a DNA sequence that made possible efficient, low-cost and large-scale genome sequencing.
- Eric Betzig and Harald Hess co-invented a super-resolution imaging technology called photoactivated localization

CLASS OF 2024

microscopy (PALM), enabling scientists to distinguish individual molecules.

- Andrea Goldsmith created technical innovations including adaptive beamforming for multiantenna Wi-Fi.
- Asad Madni led the development and commercialization of the MEMS gyroscope for aerospace and automotive safety.
- Lanny Smoot, a Disney Imagineer who specializes in theatrical technologies and special effects, is the patent leader at The Walt Disney Co. with more than 100.
- Xiaowei Zhuang introduced a method of super-resolution imaging— stochastic optical

reconstruction microscopy, or STORM.

POSTHUMOUS

- Joseph-Armand Bombardier invented the Ski-Doo[®] snowmobile.
- George Washington Murray invented agricultural machinery designed to accelerate planting and harvesting processes.
- Mary Florence Potts invented an improved sad iron.
- Alice Stoll led the development of fire-resistant fabrics.
- Chemist and entrepreneur Jokichi Takamine was a biotechnology pioneer who invented Adrenaline.
- Automotive engineer Ralph Teetor invented cruise control.

JOURNEYS OF INNOVATION

District of Determination

Henry Baker's historic list of Black patent holders includes prominent Washington, D.C., inventors and entrepreneurs ву кевекан оакеs

S panning nearly half a block on the corner of 15th and H Street N.W., the sturdy, brick Wormley Hotel was located in the heart of D.C. society in the late 1800s.

The headquarters of Riggs Bank, so prominent it was referred to as the "Bank of Presidents," resided down the street. Patrons could easily stroll through Lafayette Square, attend a service at St. John's Episcopal Church, or—given the proper invitation —enjoy a conversation with pre-eminent intellectuals and community leaders at the Cosmos Club, a private social venue for science enthusiasts. For those creatively inclined, the Corcoran Gallery of Art and the National Theater were within a few blocks, as was the White House itself.

> This location, alongside the outstanding hospitality the Wormley was known for, attracted all kinds of clientele, from members of Congress to ambassadors to business tycoons.

> > This was all the more exceptional given that James Wormley, the hotel's proprietor, was not permitted at the Cosmos Club nor was he able to sit wherever he liked at the National Theater. Wormley was a Black man living in a city where many

facilities were segregated by race.

Less than a mile away, among the rows and rows of patent models stored at the Patent Office, was a gong and signal chair invented by Miriam Benjamin, a Black woman. The chair, which allowed the user to quietly call for assistance while remaining seated, had a number of potential applications.

Patrons staying at hotels like the Wormley could call for a waiter or attendant, as could passengers waiting in a railway station or patients at a hospital. Benjamin estimated that her invention could cut down the number of attendants needed by 30 percent to 50 percent.

Taking an active role in marketing her chair, Benjamin lobbied for its use by the House of Representatives, a legislative body that was not representative of people like her. In 1888, the year Benjamin received her patent, none of the elected members were women and very few were Black.

A good deal of what historians know about African American entrepreneurs and inventors like Wormley and Benjamin comes from census data. At the turn of the 20th century, clerks at the Census Bureau, then headquartered in southwestern Washington, D.C., were expected to accurately process hundreds of census schedules per day.

Robert Pelham, who had an exceptional mind for improvements, took this as a challenge. Two years into his tenure at the Census Bureau, he set a new record by tabulating 1,150 schedules in one day.

The previous record? 591.

Three years later, at a time when many newspapers were printing articles questioning the intellectual capabilities of Black men like Pelham, he received a patent for a device that made his work even more efficient.

Miriam Benjamin, James Wormley, and Robert Pelham had a great deal in common. They were all originally from below the Mason-Dixon line, born free during the era of enslavement. They were all determined to succeed and build generational wealth and came from families who resolved to do the same. For a time, they were all part of an emerging middle class of Black entrepreneurs, professionals, and civil servants living in the nation's capital around the turn of the 20th century.

And they all appeared on patent examiner Henry Baker's list of Black inventors.

For the entire story, see uspto.gov/ learning-and-resources/journeys-innovation.

Inventor Miriam Benjamin was part of an emerging middle class of Black entrepreneurs.

NEWS FLASH



FOR INCLUSIVE INNOVATION: The USPTO announced a new National Strategy for Inclusive Innovation on May 1, in conjunction with the agency's work with the Council for Inclusive Innovation (CI2).

The initiative, announced on Capitol Hill, aims to grow the economy, create quality jobs, and address global challenges by increasing participation in STEM, inventorship, and innovation among young people and those from historically underrepresented and underresourced communities.

The USPTO has outlined a comprehensive strategic approach for the federal government, academic institutions, and private industry to share and implement best practices that inspire and support a diverse population of problem-solvers.

For more information: https://bit.ly/4bjbZ3P

YOUR COMMENTS ON AI NEEDED: The USPTO published a Request for Comments (RFC) seeking public feedback on how artificial intelligence (AI) could affect evaluations the agency makes as it determines whether or not an invention is patentable under U.S. law.

In the RFC, the use of AI poses questions as to what qualifies as prior art and the assessment of the level of skill of a person having ordinary skill in the art (PHOSITA). The USPTO's AI and Emerging Technologies Partnership team has spent the past few years engaging with the innovation community and AI experts on issues at the intersection of AI and IP policy. Comments are due July 29.

To comment, see the Federal Register Notice link at the bottom of this page: https://bit.ly/44DjEbf

FIND FREE SERVICES: uspto.gov/freeservices has recently been updated to help you find specific information and resources, inclusive of all stages in the inventing journey. You can filter by a number of topics, including learning the essentials, preparing to file, applying for protection, and more.

Try it and let us know what you think. You can provide feedback at the bottom of the webpage to help us improve this resource.

WHAT'S NEXT

Get IP Basics, Trademark and Patent Help

Learn key intellectual property basics from the experts in **The Path to a Patent, Part I: IP Basics** on July 11 from 2 to 3:30 p.m. ET. The free module is part of an eight-part series each Thursday (skipping August 15 and September 5). Part 1 will:

- Provide a brief overview of the different types of IP (patents, trademarks, trade secrets, and copyrights)
- Review the patenting process from invention, to application, to issue
- Cover the requirements for patentability
- Explain how to determine whether a provisional or nonprovisional application is right for you
- Discuss how to weigh the costs and benefits of hiring a patent attorney

For questions about the event or series, contact **SiliconValley@uspto.gov.** Register at **uspto.gov/events**.

TRADEMARK SEARCHING OVERVIEW: If you are

interested in conducting basic trademark searches, a free webinar can show you how.

Federal Trademark Searching: Overview, on June 21 from 3 to 4 p.m. ET, introduces new users to the fundamental mechanics of using the USPTO's trademark system. The webinar covers why you should search, provides a basic search strategy, shows common searches, and tells you how to find help.

Register at uspto.gov/events.

And don't forget about the upcoming **Trademark Basics Bootcamp**, an eight-part series starting July 9 (see this issue's inside cover).

PATENT SEARCH HELP: If you find patent searching a challenge, you can consult directly with librarians from the Patent and Trademark Resource Center Program via the virtual webinar **Getting Started with Public Patent Search**, June 27 from 2 to 3 p.m. ET.

Register at uspto.gov/events.

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

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Historic Patent Nears, With Added Intrigue



The countdown is on, even if we don't have an end date.

But based on the pace of patent activity in the past 15 years or so, it's possible the ceremonial 12 millionth U.S. patent will be announced in 2024—maybe even this summer.

Since 2010, the USPTO has issued roughly 300,000 patents per year. Given that the 11 millionth patent was issued on May 11, 2021, and that the 10 millionth patent came three years before that, the time should be nigh.

(For the record, we will never know precisely how many U.S. patents have been issued. The country's first patent, issued in July 1790, was unnumbered, as were other "X patents" until the numbering process began in 1836. That year, a fire at the United States Patent Office in Washington, D.C., destroyed about 10,000 patent drawings and 7,000 patent models.)

U.S. Patent No. 11 million was issued to co-inventors Jason Diedering and Saravana Kumar at 4C Medical Technologies in Maple Grove, Minnesota. They developed a medical device that positions and repositions an expandable prosthetic valve in a patient's heart.

U.S. Patent No. 10 million was for a process that's always right on the tip of our collective tongues: "Coherent Ladar Using Intra-Pixel Quadrature Detection." This describes a method of bouncing lasers off targets to determine their range and velocity.

One of the most fun aspects of anticipating a milestone patent is whether it will be highly technological and forward-looking, or a new fetch toy made by Fred's Dog Company. But at *Inventors Digest*—where we actively celebrate women as inventors—we can't help but wonder if a new kind of history will be made on inventing's Super Tuesday (the USPTO only issues patents on Tuesdays).

A look back at all the million milestone patents shows no women on them. That's not surprising, given that women are named on less than 13 percent of all U.S. patents.

Still, with women making up roughly half the U.S. population, there is hope a woman will be named on No. 12 million.

That is basically up to chance, of course. But it's fun to think about, especially since we know it will happen on a milestone patent someday.

And someday is an important word in the dreams of all inventors.

—Reid (reid.creager@inventorsdigest.com)

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Everybody's Talking

Niko Moon to ID: Thanks

Rail-thin Niko Moon was exhausted and soaking wet from the first of three sold-out weekend performances in Isle of Palms, South Carolina. But after the show on his tour bus, when I asked him about his new Happy Himalayan water, he sprang up and ran toward the back of the vehicle to get his laptop.

The water had arrived at his house earlier that day—May 16. He beamed while we watched a video of the container being picked up and changing to a soft pink upon touch, part of the product's sensory comfort aura.

Before the concert, I had presented the country singer/writer's "people" with a dozen or so May issues of *Inventors Digest* that featured him as the cover story, highlighting his new water product and upcoming clothing line. Moon was profoundly grateful and excited. He had already posted the cover on Facebook and Instagram.

Talking to him in person confirmed what was obvious during my phone interview with him: What happens to a Happy Himalayan container when held is the same kind of thing that happens when Niko Moon begins to speak.

The man who was born Nicholas Cowan and grew up in rural Georgia is polite, gentle, friendly—but often exhibiting a childlike wonder and excitement. Some of that excitement pours out as an entertainer; he is a tornado of motion and dance onstage.

Moon typically holds a generic drinking cup while performing. I asked him about this because he is a recovering alcoholic.

He told me the prop is not intended to celebrate drinking alcohol but to encourage people to have a good time: "Just because I can't be drinking alcohol doesn't mean I can't have a good time with someone who is having a beer."



He said once Happy Himalayan gains a following throughout the country, he will probably retire the cup and hold a bottle of his artesian water. I told him he should have the cup framed.

He laughed—the kind of genuine, relaxed laugh that comes from a person who knows he possesses true riches by making people happy and improving their lives. —*Reid Creager*

Special thanks to Moon's publicist, Zack Teperman; Cam Mikell, assistant tour manager for Moon's "Better Days" tour, directed by Quinton Kelley; and Moon's full manager, Chris Kappy, at Make Wake Artists.

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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.

BRIGHTIDEAS

Cubetto Playset HANDS-ON CODING FOR YOUNG CHILDREN primotoys.com

Named for a friendly wooden robot, Cubetto is an award-winning, Montessori-approved coding toy that makes programming logic accessible starting at age 3. It uses hands-on coding blocks—no screens, tablets or WiFi.

Each playset comes with Cubetto; an interface board; 16 blocks for different directions; a world map, and two storybooks.

The interface board automatically pairs with Cubetto. The blocks are a coding language you can touch, like MIT's LOGO from the 1970s. The 1-by-1 meter, cloth map helps you plan adventures, with a storybook full of progressive activities and challenges.

Cubetto retails for \$225.

HoloBike TRAINING BIKE THAT SIMULATES TRAIL RIDES IN 3D saga.inc

HoloBike's makers say it is the world's first holographic exercise bike. It features a 3D portal with 4K clarity, providing virtual scenes that can pop off the 27-inch-wide screen or recede into the horizon for lifelike rides. No virtual reality headsets or augmented reality eyewear are needed. The bike's electromagnetic resistance control adapts to the virtual environment to simulate realistic hill climbs and gear shifting. It adjusts to rider heights of 4 feet 11 to 6 feet 4 and has a compact footprint of 59 by 26 inches, which is smaller than most yoga mats. HoloBike will retail for \$2,999. December shipping to crowdfunding backers is planned.

LaserPecker LP4

DUAL LASER ENGRAVER laserpecker.net

Billed as the world's first dual-laser engraver for almost all materials, this portable device can create meaningful artworks, start small businesses and bring artisan ideas to life.

The 10W 450nm blue laser engraves on wood, acrylic, glass, leather, ceramic, paper, stone, metals and more. It is also capable of cutting wood up to 8mm and acrylic up to 5mm with the proper settings. The 2W 1064nm infrared laser engraves on stainless steel, aluminum alloy, gold, silver, plastic and more.

With a basic engraving area of 120mm by 160mm, the LP4 is said to provide the largest workspace in its class. The engraver retails for \$1,799.

"Doubt is the father of invention." – AMBROSE BIERCE

NeoRulerGO

COMPACT, DIGITAL ROLLING RULER *hozodesign.com*

The NeoRulerGO combines ±1mm precision and convenience. Its rolling wheel glides smoothly over surfaces, allowing for easy measures; integrated laser alignment ensures accuracy.

When measuring point to point, measure from start to end point, both centered on the rolling wheel. Corner to corner, position the laser at one side of the corner to start your measurement, then rotate to align the laser with the opposite side of the corner to finish.

The package comes with the NeoPencil Case and Stand. With a suggested retail price of \$69, NeoRulerGO is to be shipped to crowdfunding backers in July.

The **No-Fly** Zone

PATENTED ALMOST 125 YEARS AGO, THE SIMPLE FLY SWATTER HAS SOME INTERESTING SCIENCE BEHIND IT BY REID CREAGER

AYBE IT'S FUNNY IF YOU'RE A FLY.

In the 2005 sci-fi movie "The Hitchhiker's Guide to the Galaxy," there's a scene where the characters find themselves on a planet where they are slapped in the face by fly swatter poles that pop out of the ground every time someone has an idea.

Why the writers of the movie did not get the same treatment for conceiving this scene remains a mystery.

The humble fly swatter has a more important function than this, even if it's a simple one. And this killer is still very much alive: A quick search online even found reviews for the best current models.

NO SWAT TEAM HERE

Of all the subjects I have written about in this space in the past eight years, I never thought there would be one that I have made obsolete—at least in my household.

We never chase a flying bug with a fly swatter, because I have an invention!

OK, maybe it's more of a hack. But when I see a housefly, bee or wasp flying around my house, I spray it—from a safe distance a few feet away—with store-bought window cleaner (trying to avoid using the brand name). There is something in its ingredients, probably ammonia, that renders the bug unable to fly.

Just let it struggle and fall to the ground, and ball it up inside a tissue, napkin or paper towel.

I'm open to the notion that someone else has thought of this. Being first to innovate gets harder and harder in our world. —*Reid Creager*



As with a lot of simple products, there is evidence that fly swatters have been used in some form for centuries. The modern fly swatter was first patented in 1900 by Robert Montgomery of Decatur, Illinois—which has led many Internet sites to proclaim him as its inventor. (We found no evidence to the contrary.)

Science in the air

The most interesting thing about this flat, dull-looking device is the science behind it.

Ever wonder why so many fly swatters have slits or holes on the business end?

According to Medium.com: "This design serves two purposes—to lower air resistance and to create turbulence.

"The holes or slits help reduce air resistance when swinging the fly swatter through the air, making it easier for you to move it faster and generate more force. The turbulence created by these holes also helps disorient and confuse the insect, making it easier for you to hit your target."

Although Montgomery was the first to patent the fly swatter (the original Sultan of Swat?), theinventors.org says Frank H. Rose was the first to market it under that name in the early 1900s. The name "fly swatter" was popularized by Dr. Samuel Crumbine, a member of the Kansas Board of Health.

Legend has it that during a baseball game, a reference was made to a "fly ball" and that Dr. Crumbine used that in his slogan for the fly swatter to "Swat that fly!"

A Kansas schoolteacher, Rose built a device from a yardstick and a piece of screen. Per the account, "The holes in the screen were essential because a fly can sense the air pressure of a solid object like a hand." Legend has it that during a baseball game, a reference was made to a "fly ball" and that Dr. Samuel Crumbine used that in his slogan for the fly swatter to "Swat that fly!"

The wired swatter was very much *de rigueur*. Text with an advertisement for "The King Fly Swatter" in the June 1901 *Ladies Home Journal* read:

"The wire being almost invisible the flies and mosquitos are quickly killed, thus clearing your house of them in only a few minutes. A prominent lady has said, 'It is the most prized article in my home."

Old school, or new?

Many of today's top-rated fly swatters are electric. However: These usually have a shorter reach unless they are extendable; you have to be a lot more careful when cleaning them with soap and water; and they need a power source, such as batteries.

Zappers are effective, but they aren't swatters per se. And the noise they make when making the kill can be as cringeworthy as that "Hitchhiker's Guide" scene.

Many varieties of old-school, manual fly swatters remain on the market. Some come in sets of five, presumably so you can keep them in multiple rooms and not lose track of your annoying offender by leaving the room in search of your weapon.

These can be made of plastic, metal, graphite—even leather. So even with an ordinary household device, in a fashion sense you're still killing it. €



Robert Montgomery's "Fly Killer" received U.S. **Patent No. 640,790** on January 9, 1900—less than three months after the application was filed. Its main specification says: "This invention relates to fly-killers made of wire-netting (sic). Its object is to provide a cheap device of unusual elasticity and durability, which is exemplified in the structure hereinafter described, and defined in the appended claims."



INVENTOR ARCHIVES: JUNE

June 9, 1892: Fashion icon Helena Rubinstein, who invented different cosmetics and founded the Helena Rubinstein Co., was born.

Born and raised in a Jewish ghetto in Krakow, Poland, Rubinstein was nicknamed the "Empress of Beauty." Her company holds several patents.

Her personal African art collection has been the subject of an unprecedented exhibit in Paris.

The First Human Invention

THE HAND AX, THE FIRST MANMADE TOOL, IS THE EARLIEST EVIDENCE OF OUR ABILITY TO CREATE BY JACK LANDER

OW IS it that some of us have extraordinary natural ability to create solutions to problems and needs, and others excel as cooks, carpenters, physicians, and so on?

An easy answer is that we are born with these tendencies and abilities. That proclivity is coded in our genes.

OK, but at some point in our evolution, these attributes didn't just appear out of thin air. A complementary need must have initiated them.

The story, I believe, lies in human prehistory—the roughly 2 million-year period that began with the first Hominid (human species family), Homo habilis (handy human).

The trait that qualified Homo habilis was its ability to shape a small rock by chipping away at a blunt edge to create a sharp edge. Thus came the first manmade tool, the hand ax, and the first evidence of the ability of humans to create: to invent.

In fact, the graduation of humans from Australopithecines to Hominids appears to depend upon some evidence of a baseline mental capacity. With the skills of writing or drawing waiting thousands of years to be invented, a unique stone artifact satisfied the archeologists' requirement, and Homo habilis became the first of our new human species.

Next up: The spear tip

Back to the main story. The chopping down of small trees enabled humans to experience greater convenience for their fires. Before the hand ax, our tribal ancestors gathered firewood from forest floors, potentially a perilous venture.

Now you might think this first invention was followed by a continuous stream of more tools. And you'd be right—except that the next stone tool in line was the spear tip, which was discovered around 500,000 years ago, give or take 100,000 years.

That leaves us a million and a half years of inventive inactivity!

The spear itself was almost certainly much earlier. It consisted of a long, small-diameter tree branch or tree trunk sharpened into a steep, conical tip at one end using the hand ax.

However, the thin, sharp cutting edges of the stone spear-tip enabled deeper penetration of an animal's hide and greater internal bleeding—which caused the animal to fall closer to the scene where it was first wounded. Wooden spears most likely limited internal bleeding and enabled many of the wounded animals to escape and perhaps survive.

The stone-tipped spear launched the safer hunting of larger animals, thereby providing more meat as food, and larger area hides. However, leather clothing and leather shoes were not discovered until about 130,000 years ago. Leather may have been in use long before this time, along with the wooden spear.

Both items disintegrate naturally. The true dates of their first discovery are therefore uncertain.

Related tools, and results

Stone scrapers and blades were not discovered until about 40,000 years ago. Thus, we must wonder how these people prepared their leather without a custom, handheld scraper—probably another use for the hand ax.

The long gap of 1,960,000 years suggests that stone crafts-persons had not yet demanded tools to satisfy their labor needs of the era. Still, our present-day experience indicates that cultural



Until the next stone tool—the spear tip—we had about a million and a half years of inventive inactivity.

changes and complementary "tools" appear close together in time.

Computers and compatible printers happened pretty much simultaneously. The smartphone and artificial intelligence have occurred close together in time.

These related inventions happen because of our constant appetite for sophisticated toys and our incredible ability to communicate ideas.

Imagine tribal-day communication before words and language were in use. Imagine tens of thousands or hundreds of thousands of years separating one invention from the next, when communication consisted only of gestures and grunts or howls.

Thankfully, we humans are superior to the other creatures at inventing and communicating.

Oops. Stop! Halt! Blunder alert!

We believe that the honeybees invented their famous waggle-dance millions of years ago. They use the dance to communicate to their hive bees the distance and direction of flowers that provide abundant nectar, which soon becomes "our" honey.

The robin's perch in history

Birds, too, communicate through body language but also have vocalization and songs—with which they warn of danger, define territories, and help select a mate. Furthermore, robins have been known to invent a hook from a straight wire in order to capture and raise a piece of meat from a bottle that is too narrow to enter.

This seems to indicate that robins have reasoning ability. Astonishing, eh?

So, my point is that although we humans may claim to be the first inventor of stone tools, we may have to eventually yield our honorary title to robins.

Incidentally, we have advanced to Homo sapiens (wise humans) through and with approximately 20 other Hominid species, if Charles Darwin was correct. And we Homo sapiens are the only survivor of those species from the Hominid family.

I believe it is fair to claim that the first inventor deserves much of the credit for initiating the art of tool making, and thereby enabling Homo sapiens to exclusively emerge. We may have remained "Homo simpleton" without that inventor. €

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



Under the Influence

HOW TO TEAM WITH SOCIAL MEDIA INFLUENCERS TO INTRODUCE AND LEVERAGE YOUR PRODUCT BY ELIZABETH BREEDLOVE



S THE RISE of social media as part of a cohesive digital marketing strategy creates opportunities for inventors and entrepreneurs to showcase innovative products online, one of the most effective tactics is collaborating with social media influencers.

These influencers often hold significant sway over their followers, making them valuable partners for product launches and business growth. Here, we'll examine the power of influencer partnerships and explore how inventors can leverage these collaborations to successfully introduce new products to the market.

How influencers succeed

Social media influencers have emerged as powerful voices online, commanding the attention and loyalty of, in some cases, millions of followers across various platforms. Whether they specialize in beauty, fashion, technology or lifestyle content, influencers possess the ability to shape consumer trends and purchasing decisions with authentic and relatable content.

The success of influencers lies in their ability to connect with audiences on a personal level, fostering trust and credibility through genuine interactions via social media. Their followers often view them as peers rather than more traditional "celebrities," making their recommendations and endorsements highly valuable.

Value for brands

When it comes to product promotion, influencer marketing has become a significant strategy for many brands looking to reach their target demographics in a more authentic and engaging manner. By partnering with influencers whose interests and niche align with their product, inventors can tap into established communities of engaged consumers, driving awareness and generating buzz around their inventions and new products.

Factors for strategizing

Successful influencer partnerships are built on trust, collaboration and shared objectives. When seeking influencers to promote their products, inventors should consider several key factors:

- *Relevance.* Choose to partner with influencers whose audience demographics and interests align with your target market. A tech-savvy influencer, for instance, would be an ideal partner for promoting a new gadget or innovative tech product, while a fashion and beauty influencer would be a better fit for a new beauty product.
- *Authenticity.* Look for influencers who genuinely use and value your product and are likely to convey enthusiasm and authenticity in their promotions. Audiences can detect insincerity, so it's crucial to prioritize genuine connections over sheer follower count. An influencer who is excited about your product but has fewer followers will generate a much better return than one who has two or three times as many followers but isn't as invested in what you have to offer.
- *Engagement*. Evaluate an influencer's engagement metrics, such as likes, comments, and shares, to gauge their ability to drive meaningful

interactions with their audience. Higher engagement rates indicate an influencer's effectiveness in capturing and retaining attention. However, watch out for influencers with a high number of bots and fake accounts following them; telltale signs are very high or very low levels of engagement, along with a large percentage of spam comments on posts.

• *Content style.* Consider the influencer's content style and aesthetic to ensure compatibility with your brand image and messaging.

Maximizing collaborations

When launching a product, inventors can leverage influencer partnerships to generate excitement, build anticipation and drive sales. Here's how to maximize the impact of influencer collaborations during the product launch phase:

• *Teaser campaigns*. Partner with influencers to create teaser content that offers sneak peeks of your product, highlighting its unique features and benefits. Teaser campaigns can pique curiosity and generate anticipation among their followers, laying the groundwork for a successful launch.

Once you launch, consider providing influencers with a special, limited-time discount

code they can share with their followers. This helps create a sense of urgency and encourages people to purchase your product as soon as it launches, and gives you a method to easily track the return on investment of each influencer partnership.

- Unboxing and reviews. Invite influencers to unbox and review your product on their platforms, providing firsthand impressions and thoughts. Authentic reviews from trusted influencers can help alleviate consumer skepticism and build credibility around your product's performance and quality.
- Giveaways and contests. Collaborate with influencers to host giveaways or contests featuring your product as a prize. This not only encourages audience engagement but expands your reach as participants share the contest with their networks. Plus, influencers value giveaways because they typically increase their follower counts as well. €

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.



KEYS TO A LASTING PARTNERSHIP

Beyond the initial product launch, cultivating longterm relationships with influencers can yield ongoing benefits for inventors and entrepreneurs. By investing in sustained influencer partnerships, you can maintain brand visibility, drive continuous engagement and foster loyalty among consumers. Some strategies:

- Regular communication. Stay in touch with influencers beyond one-time campaign collaborations, keeping them informed about new product developments, upcoming launches and brand initiatives. Building a relationship based on open communication and mutual respect strengthens the partnership over time.
- **Collaborative product development.** Involve influencers in the product development process by soliciting their feedback, ideas and suggestions. Collaboration fosters a sense of ownership and investment in the brand, deepening the influencer's commitment to promoting your products. You could even consider partnering with an influencer to create

a new product, or a new color or version of an existing product.

 Exclusive partnerships. Offer your highestperforming influencers exclusive partnerships or ambassador roles, providing them with incentives such as

early access to new products, exclusive discounts, or personalized perks. Exclusive partnerships incentivize influencers to prioritize your brand and foster a sense of exclusivity among their followers.

• **Community engagement.** Encourage influencers to engage with their audience on behalf of your brand through live Q&A sessions, product demonstrations, or interactive challenges. Facilitating direct interactions between influencers and consumers strengthens brand affinity and encourages authentic advocacy.

Pedorthics Purpose

WOMAN'S EXTRA-WIDE SHOE LINE PROVIDES COMFORT WITH STYLE FOR PEOPLE WITH SWELLING ISSUES BY EDITH G. TOLCHIN

'VE ALWAYS had a shoe fetish! Take me to any department store, and I'll head straight to the shoe department.

But as people age—or for people with foot issues—comfortable, attractive shoe style selections diminish. Laura Oden of Anchorage, Alaska, has invented a solution.

Edith G. Tolchin (EGT): Tell us about yourself and the salient feature of your shoes.

Laura Oden (LO): I have lived in Anchorage for the past 30 years. Pandere Shoes is my first and only invention.

I had cancer treatment as a teenager that left me with a 40-year struggle with lymphedema. In my case, one foot and leg are chronically swollen.

Many millions of people all over the world deal with similar swelling from a host of causes. Sometimes it's temporary, like foot surgery; other times, it's chronic and can be very debilitating. Shoes are essential for mobility and dignity, and can have a huge impact on quality of life.

The idea for Pandere Shoes came from my lifelong battle with lymphedema. Foot swelling made finding comfortable shoes a nightmare! Traditional orthopedic shoes, while targeted for older feet and swelling, are often unattractive and often don't provide much comfort.

Pandere Shoes fills this gap by offering aesthetically beautiful, comfortable footwear that stretch and have adjustability in the key areas in which people have swelling: the ankle, midfoot and toe area.

I was not interested in wearing orthopedic shoes at age 35. I feel the same way at age 60. I want to look and feel good in something that allows me to be active all day, every day.

EGT: Can you describe the various foot conditions your shoes accommodate?

LO: Our shoes are primarily designed for swelling—including conditions like lymphedema,

lipedema and edema from congestive heart failure. However, it didn't take long before we discovered that our shoes also work very well for bunions, hammer toes, pregnancy, diabetes, neuropathy, gout, arthritis, high arches, and for those with wide or sensitive feet.

EGT: When did you start selling the shoes?

LO: We launched just before the holidays in 2018. This was nearly two years from when we began ideation and prototyping.

I was itchy to launch for fear of someone else stepping into our space. But the truth is that the depth of knowledge that you've honed through extensive ideation and prototyping can't be easily replicated. That fear is usually overblown.

On the other hand, you don't want to let perfection be the enemy of good. Finding the right balance is a struggle for any entrepreneur.

EGT: How many different styles are you selling, where are you selling them, and what is the pricing?

LO: We have iterated 19 different styles. Each new style incorporated feedback from the prior shoes.

Unfortunately, there is no way to know which shoes will work best until you get them on people's feet. Now that we've tested a lot of styles, we're focusing on the styles that fit the most people—like the Two Step, the Globetrotter and our slide, the Clog. These styles have a larger delta of expansion and accommodate both larger and smaller volume all in one shoe size.

We sell on our website and through a growing number of retail shoe stores throughout the country. Our prices are average for pedorthic footwear—from \$130 to \$180.

We don't sell on Amazon, because we want to cultivate a direct relationship and connection with our customers. We often chat with them directly to learn more about their circumstances and struggles. You can't do this on Amazon! Amazon actively prevents any relationship with a customer.

We have also explored other channels. For example, we put our final clearance items on Poshmark.

EGT: What are the various materials used for the shoes?

LO: Our signature, soft, durable nubuck leather sets us apart from other pedorthic brands. We also use strategically placed stretch materials like Lycra or neoprene both inside and outside to provide style and functionality.

Our shoes can expand up to 3cm of volume, and this is a key element of our patent.

EGT: Where are you manufacturing?

LO: We initially manufactured in Portugal and are now exploring options in Mexico or India to reduce production costs. This will allow us to move forward faster with more shoe development.

EGT: Are your shoes patented?

LO: Yes, we have a U.S. utility patent, and we're awaiting approval in Canada. We worked with an IP firm specializing in footwear patents.

The process was expensive, but it freed me up to focus on other aspects of the business. We've got trademarks, too, and we've also got trade secrets.

I think trade secrets often get revealed or further developed after the business launches and you're getting feedback from customers. Sometimes, trade secrets are part of the discovery and iteration process. These can be just as valuable as IP.

EGT: Have you done any crowdfunding?

LO: Yes. Lots! We launched two Kickstarters, one Indiegogo, and participated in two Kiva funding rounds.

I'm a fan of crowdfunding. It's a useful tool for early-stage inventors. It provides both cash and market validation. Cash is always the hard part for an early-stage business.

EGT: Any plans for different styles or complementary accessories?

LO: Yes! We've just added beautiful Italian leather wallets and are working on the next shoe width that we need—XXW.

We also offer the most wonderful bamboo socks, which are very soft. They have a large stretch capacity at the top and additional cushion under the foot for added comfort.

EGT: What advice would you offer to inventors contemplating manufacturing a footwear item?

LO: My primary advice is, don't underestimate the financial requirements of launching a shoe company. It's not just the initial cash to produce the first round of production. The footwear manufacturing cycle demands you to predict your needs and place orders 6 to 9 months in advance.

Success in this industry hinges on having the agility to gather feedback, make corrections and accept that sometimes early styles may not always hit it out of the park.

Keep iterating. That's how you get where you need to be. ${\ensuremath{\mathfrak{O}}}$

Details: pandereshoes.com

Edith G. Tolchin has written for Inventors Digest since 2000 (edietolchin.com/ portfolio). She is the author of several books, including "Secrets of Successful Women Inventors" (https://a.co/d/fAGIvZJ) and "Secrets of Successful Inventing" (https://a.co/d/8dafJd6). Laura Oden's lifelong battle with lymphedema and swelling feet were the impetus for Pandere Shoes.

Questions with UIA VICE PRESIDENT CHRISTOPHER GUCCTOPHER

HE GUY WEARS SO MANY HATS, he should be a haberdasher.

Accomplished international business leader in automotive, aerospace, customengineered products, manufacturing and sales who was a driving force behind BMW's startup and success in the United States. Lean Six Sigma (an esteemed efficient, team-oriented process) manufacturing expert whose "Made in America" plant is Walmart certified, with his products displayed alongside such household name products as Scrub Daddy[®], Squatty Potty[®], Paint Brush Cover[®], Drop Stop[®], and ReadeRest[®]. Mechanical engineer who was an integral part of the 1/8 turn fuel system design for Ford Motor Co.

Launching force on "Shark Tank." Business mentor. Inventor coach. Podcast host. Founder, CEO of Modern Inventor. And last but not least, vice president of the United Inventors Association.

Yet Christopher Guerrera recently found time to discuss his inventing and entrepreneurial pursuits with *Inventors Digest*, with particular emphasis on his role with the UIA, its mission and impacts.

Your core professional background is in mechanical engineering. What influences led you to this?

I was drawn to be a mechanical engineer due to a fascination with how things work and a passion for solving complex problems. I also have a real desire to contribute to society by designing innovative solutions and improving existing technologies.

I have always enjoyed working with my mind and with my hands, so it was inevitable that I would become an engineer.

Tell us about your experience with the 1/8 turn gas cap design, now ubiquitous in the automotive industry.

The design provides a quick and easy way to access the fuel tank for refueling while ensuring a secure seal to prevent fuel leakage and evaporation. As chief design engineer, our launch revolutionized the industry as the first type of cap in the automotive industry that later found all other larger auto makers following suit.

The "1/8 turn" designation refers to the amount of rotation required to open or close the cap fully. Unlike traditional threaded caps that

may require multiple rotations to tighten or loosen, the 1/8 turn gas cap typically only needs an eighth of a full rotation to lock or unlock, making it faster and more convenient.

The drive behind this was for the older generation with weaker hand strength to continue filling their vehicles with ease. These caps often feature a simple, yet effective locking mechanism that engages with the fuel filler neck when closed, providing a tight seal to prevent fuel vapor emissions and the entry of foreign objects or contaminants into the fuel tank.

How many patents, copyrights, trademarks, etc., do you own?

I am listed on various patents throughout my professional career, most notably the 1/8 turn gas cap design. In regard to trademarks, I am listed on several: my manufacturing company PACE (Productivity and Capacity Excellence), and my most recent "Pitch the Pros," where we give the entrepreneur/inventor the opportunity to pitch their product to panelists who range from those previously on "Shark Tank" to merchandising experts in the industry, or TV hosts at QVC, HSN, CBS, FOX, "Today" and "Good Morning America." The entrepreneur/inventor receives immediate feedback from these individuals who have all been in the same position and have gone on to successfully launch or license their products.

You never know who is sitting in the audience listening. We find venture capitalists, "Shark Tank" casting crews, big box retail buyers and at times an actual Shark: Daymond John from "Shark Tank," a partner of mine, visits our Inventor Corner from time to time to add valuable insight.

What is the mission of the UIA, and why is its role important?

Founded in 1990, the UIA is dedicated to supporting and advocating for inventors and innovators. Its mission is to provide resources, education and networking opportunities to help inventors navigate the invention process, protect their intellectual property, and bring their ideas to market successfully.

The UIA plays an important role in the inventor community by offering education and resources, networking opportunities and advocacy and support.

The UIA is an inclusive organization that welcomes inventors, entrepreneurs, product developers, patent attorneys, industry professionals and anyone else with an interest in innovation. The exact number of members may vary over time, but right now we have more than 100,000 members and are growing every day. Accomplished business executive and manufacturing expert Christopher Guerrera is helping the United Inventors Association prioritize improvements in education and networking.

What growth or improvements would you like to see?

I would like to see the UIA growth continue to attain a mass audience around the world. The UIA is doing exceptionally well.

There are a couple areas of improvement that we are prioritizing to enhance the organization's impact and support for inventors and innovators.

One is education. We are putting together and expanding the range of educational resources and programming offered by the UIA to cover a broader spectrum of topics relevant to inventors—such as intellectual property law, prototyping, crowdfunding and marketing strategies. By providing comprehensive and up-to-date educational materials, we can better equip inventors with the knowledge and skills they need to succeed. We want the UIA to be the one stop for all resources and opportunities to support the inventory community.

Another is networking. I can't stress enough the importance of networking for inventors to connect with potential partners, mentors, investors and customers. We are currently organizing more networking events and workshops where inventors and buyers get the trade show feel but on a more personal level.

Guerrera leads and is affiliated with many inventor/ entrepreneurial organizations, as well as being a partner with Daymond John of "Shark Tank."

We are bringing the pros to our events and workshops that the inventor may not have had the opportunity to network with and making it possible to get firsthand knowledge for those who have been through the same exact journey.

Why do so many inventors fail as entrepreneurs?

Quite simply, lack of business skills.

Inventing a new product is just one aspect of entrepreneurship. Successful entrepreneurs also need skills in business planning, marketing, sales, finance and operations. Many inventors may lack these skills or may not fully understand the business side of bringing their invention to market.

You have to know what you are good at and what you are not good at. Whatever you are not good at, hire or partner with someone who is.

Do your research on anyone you hire and check their reviews. Also, check with other entrepreneurs. Make sure the company does not have a bad reputation and isn't known for failing to deliver what they say. This will be one of the most critical steps in the process of a successful journey.

Tell us about your "Shark Tank" experience that was tied to your "Made in America" products. Is it as terrifying as they say, and true that you have to take a psychological evaluation after going on?

The "Shark Tank" experience was pretty nerveracking and exasperating. My event was during COVID, so I was in Las Vegas locked in my room for 10 days prior to pitching to the Sharks



MASTERMIND



"You have to know what you are good at and what you are not good at. Whatever you are not good at, hire or partner with someone who is."

on the 11th day. We were in complete COVID protocol and lockdown in our rooms, so I spent a great deal of time rehearsing my pitch and reviewing my data points for my chance to pitch to the Sharks.

Once I was on the set, feeling a little nervous and the Sharks' questions coming from every angle—the answers came out naturally and without hesitation.

And yes, you do have to take the psychological evaluation immediately after the show. I have been on a lot of stages, including my proposal to my wife, Brandi, live on the "Good Morning America" set, but the "Shark Tank" pitch experience was on a whole new level.

What differentiates "Made in America" products from others?

The ability to turn around and fill an order immediately. I personally experienced this right after my airing on "Shark Tank." Our orders sold out on Amazon before our episode finished airing, and over the next several days we completely sold out of all the inventory we built in anticipation of our grand finale Season 12 airing.

The ability to have suppliers nearby and my injection mold in the same manufacturing facility allowed me to fill orders quickly—and more important, allowed me to continue building out our inventory to ship our record orders from our "Shark Tank" airing without missing a beat.

If we had been shipping from abroad, I'm not sure this would have been possible with the lead times and cash necessary to build out the necessary inventory to avoid such an occurrence.

Tell us about your successes at BMW.

The interior design teams behind the BMW Z3 and X5 played crucial roles in creating exceptional driving experiences and setting new standards in automotive luxury and functionality.

The BMW Z3, introduced in 1995, was the company's first mass-produced roadster. Its interior design group focused on capturing the essence of classic roadsters while integrating modern features and technologies.

The BMW X5, introduced in 1999, was one of the first luxury SUVs to offer a combination of performance, comfort and versatility. The X5 interior group focused on creating a spacious and luxurious cabin that catered to the needs of both drivers and passengers.

You describe yourself, among other things, as an inventor coach. Do you seek out people, or do they come to you?

Early in my career, I spent a great deal of time in Corporate America as a senior-level executive with Fortune 500 companies. Now that I have been doing this for decades, my name and reputation are readily available. I get a great deal of inquiries through my inspiring network and now with my newly launched Modern Inventor website, through references, social media and my national trade show presence.

Topics I advise my clients on, but not limited to, are guidance, support and advice to individuals who are navigating the process of inventing and bringing their ideas to market. It ranges from idea validation, product development and business planning to more complex topics such as setting up and running their manufacturing plants.

My clientele ranges from early startup inventors to already established and selling in retail—and of course, I am always available to mentor and coach an entrepreneur needing support to move their idea forward. €

Details: chrisguerrera.com and modern-inventor.com



Guerrera appears on the set of WSPA News 7 in Spartanburg, S.C., with Megan Heidlberg and Jamarcus Gaston. **Guerrera** features new products on a WSPA show he hosts called "Modern Inventions"-not to be confused with Modern Inventor, an organization he leads that is devoted to educating and inspiring a diverse community of thinkers and makers.

Liquid Glass, a clear putty that bounces and stretches, is one of some 50 different varieties made by Crazy Aaron's.

AARON MUDERICK LEFT HIS LIFE'S DREAM TO BUILD A CREATIVE, CRAZY AND PURPOSEFUL TOY EMPIRE BY REID CREAGER

E SAID IT. He doesn't care how weird it sounds. He's not taking it back.

"The world would be a better place if people had something squishy in their hands," Aaron Muderick says.

The creative tsunami behind the desk toy and stress reliever Thinking Putty—and founder of Crazy Aaron's, a physical and online wonderland of goopy, slimy stuff and special dough to captivate and engage the senses—is a software engineer-turned inventor/entrepreneur with a child's energy, curiosity and vision who employs hundreds of developmentally disabled people.

It's no stretch to say that putty is the anchor of all this. Magnetic putty. Putty that changes color as you finesse it with your palms and through your fingers. Putty that molds, sculpts, stretches, pops, and tears. Putty that can improve the lives of its users. Putty that can change the lives of those involved with distributing and creating it.

Our interview with Muderick revealed part storytelling, part chemistry lesson, part business advice, part sound effects. The highlight was revisiting the day in 2002 when he was called into the "principal's office" at his corporate job, politely responded to an ultimatum, and embarked on a daring journey of self-discovery and accomplishment that surprised even himself.

All in on computers

He grew up in the Philadelphia suburb of Havertown, Pennsylvania. So did Richard T. James, who invented the Slinky. But if Muderick was destined to be in the toy business, it wasn't apparent for a long time.

A self-proclaimed child of the '80s, when technology was exploding into realms such as computers and video games, Muderick found his inner nerd early in life. It didn't hold him back; it embraced him back.

"The personal computer revolution was something I was completely immersed in," he says. "My father won a VIC-20 computer as a door prize at some corporate event in 1982, and I was off to the races.

"I wanted to understand it, program it, make my own games. That led me to high school running an independent computer consulting business, managing small computer networks and offices, helping people who weren't maybe as obsessed with all the ins and outs of technology."

A prodigy with a prodigious resumé before college, he majored in computer science and was "100 percent going to be in computers. I was 100 percent committed to everything that was happening in Silicon Valley: 'How can I get there? How can I make an impact?' It seems fun and amazing, building the future."

He landed a job at Apple, where he, in his inimitable words, "got to see how the sausages were made. It was amazing. But what it really came down to is that the only person who gets to be Steve Jobs is Steve Jobs. That was a great lesson." Returning to his hometown, he landed some other computing jobs but fought escalating boredom.

"I was so committed to this identity of being a software engineer. I was building web apps in Philadelphia, definitely pushing the boundaries of what was possible. But as I got more and more fidgety, I was looking for something—and there was something at my desk.

"It happened to be an egg of putty."

Beep ... mrrrp ... hmmm

Over time, Muderick noticed that his putty was getting smaller. One day, he told coworkers that he was leaving his cubicle to get lunch. He doubled back and discovered they were stealing pieces to play with.

Medical journals and *Psychology Today* have written about the latent but real neurological and emotional benefits of fidget toys for children and adults, how they may also help improve symptoms of depression, anxiety and cognitive decline. Muderick doesn't read the studies. "I just go with what my gut tells me."

But he does know that the world is increasingly becoming a place where stress relief is crucial. "I get letters about how my putty is being used by children in courtrooms who have to discuss difficult topics as witnesses, or those who have self-destructive behaviors like picking their hair or cutting their skin."

After convincing a Silly Putty manufacturer to send him 100 pounds of the stuff, and selling it at cost to coworkers and others, he realized that a more cost-effective solution would be to make the putty himself.

Although money mattered, Muderick was more interested in entertaining himself by creating new chemical combinations. Except he knew nothing about chemistry.

"But I did have a high school friend who was going to grad school to get a PhD. I called and asked for her old textbooks—and one thing I'm good at is hoovering up a textbook. So I just started teaching myself chemistry so that I would understand enough of what's happening to solve my problem."

He founded Crazy Aaron's in 1998, a fun side pursuit. Fast-forward to that day of reckoning in the principal's office; the names and company will be withheld to protect the unenlightened.

"I'm still working for someone else, writing code, sort of designing the IT systems. I was selling putty under my desk in baggies and on eBay, so it was more than just friends and family at that point."

"My phone would go, beep ... mrrrp ... wooom ...and I'm looking down and I go, 'Hmm, there's 100 bucks. There's 150 bucks. There's 200 bucks.""



Eventually, he determined that selling in metal tins made more sense because it was neater, recyclable, and something that would be a better fit on an executive's desk.

"You can have a metal tin on your desk in a serious law office. But you can't have like a *crazy plastic baaaaag* sitting there.

"I knew how to build websites. I was building them for clients. I remember seeing a vitamin website. I saw how much, in dollars, this gentleman was selling every day—I'll be honest, selling snake oil.

"And I said to myself, gosh, Aaron, you think you're selling a lot to friends and family. You think you're selling a lot on eBay. But there's a much bigger world out there than you can even conceive."

So he built a website for Putty World— Crazy Aaron's first website—and focused on Web-saleable products. Then he connected the website to his phone, which was rare in those days. But not for a nerd. "Every time I would get an order, I would get a little buzz. ... So I would be sitting in a meeting, and people are droning on about connecting a bank to an insurance company or something and I'm trying to pay attention.

"And my phone would go, *beep ... mrrrp ... wooom ...*and I'm looking down and I go, 'Hmm, there's 100 bucks. There's 150 bucks. There's 200 bucks."

Showdown at the walnut desk

In September 2002, *Wall Street Journal* reporter Susan Warren called after being alerted to Muderick's website. She was doing a story about grown-ups playing with putty at their desks.

He went to the parking lot, gave her a 20-minute interview and forgot about it—until it was a front-page story the next day.

The website went gazooey. He was "riding high, which is not unusual when one of my shenanigans sort of catches on, right?" Then there was being faced with the specter of staying Muderick teaches a polymer class. Among the entries in Crazy Aaron's putty palace are (left to right) Slime Charmers Mini Mini Mart, Lost Treasure Guardians Putty with Charm, Winter Cabin Thinking Putty, Slime Charmers Dumpster Dive, and Evergreen Thinking Putty. up nights and weekends trying to make enough putty and fill all the orders.

He was also face to face with an unhappy boss.

"You know who reads the *Wall Street Journal*? Well, the CEOs, right? So, the CEO of the company I was working for, maybe a 150-person consulting company, sits back at his big walnut desk and opens his *Wall Street Journal* that his secretary has placed there with his coffee.

"And he sees ... me."

Muderick, soon to become Crazy Aaron Muderick full time, was paged over the loudspeaker at the company: "*Please report to the principal's office*," he recalled with a smile and his best loudspeaker voice.

Muderick enjoys working with people at Lynch Community Homes, a Pennsylvania organization with a mission to provide quality services to people with developmental disabilities.

"So I go to the office with the big walnut desk that needs an even bigger room with sort of that point-five look where you're like, walking in and you're walking to the desk for an hour and you're still not at the desk yet.

"I sit down in the giant chair that makes even me look small and he said, 'What is this?' After informing Walnut Desk Guy about his side hustle that was not a hustle, Muderick says he was told, "We really don't encourage moonlighting here. You need to be fully focused on your job. So I need you to think about it and make a decision."

He recalls the "terror" of being told his job was on the line—with a phone in his pocket that was buzzing with orders.

So what was it going to be? The job, or the putty?

"Writing banking and insurance code, it just wasn't in my heart. I don't think I thought about it for 5 seconds. I said, 'Well, I guess it's the putty. And thank you very much."

A winding learning curve

This was not as simple as the conversation, or even as simple as Muderick's passion.

He had been working in computers since he was a young boy. He had "never been a guy to

walk out the door." Even if he left a computer job, it was to eventually go to another computer job. So he looked straight at his learning curve from as many angles as he could. He didn't understand accounting. Didn't understand purchasing. "I didn't understand why all the companies I was trying to buy from were hanging up on me. When I said, 'Hi, I'm Crazy Aaron and I would like to buy Chemical X,' they would just 'Click."

The manufacturing came in baby steps as his chemistry acumen and confidence congealed. Initially, he would buy completed synthesized polymer, then add modifiers and colors. But as he came to understand the original materials in those substances, he made the polymers himself and experimented with different time durations and temperatures.

Muderick explains that putty is primarily silicone—a silicone rubber. "The raw materials are raw, industrial silicon. They have to be polymerized and then all kinds of modifiers added to give it the properties you want.

"Originally, it happened in a heavy-duty contractor bag. I would pour things in and work on top of a hot plate and would just, with my feet, using my body weight, beat it up, tie it off— until I felt like it was done. Open it up and then consider coloring it or adding to the 'special sauces.'

"Then I learned that with machines, I don't have to kill myself making this stuff because it's thick and viscous."

His putty empire has expanded to the point where he can't pin down how many different ones he makes. It has been over 300 but now at least 50 at any given time, he says.

Until 2019, all the putty creations were uniquely his. Muderick eventually realized "this was killing me, because the company was growing, the demands of the market were growing, and I just couldn't keep doing it.

"When you bring more voices in, you bring more ideas in, to riff off what you've done. It's gonna help everybody."

He says this is especially true with people who are in chemistry and chemical engineering who are creative but not in jobs that support that creativity. "So I can find



those people and bring them into the organization. That's the Venn diagram to bring the wonder by connecting creativity and science."

Protecting people and product

Bringing the wonder is the essence of Crazy Aaron's.

For years, the company has hired hundreds of developmentally disabled people—providing

AARON MUDERICK

BORN: Havertown, Pennsylvania

HOME: Narberth, Pennsylvania

PERSONAL: Single, two girls age 18 and 20.

EDUCATION: Bachelor of Science in computer science, University of Rochester

AWARDS: Baker Industries Person of the Year 2022, Handicrafters Best Friend Award 2024

HOBBIES: Volunteer firefighter, film photography and unusual darkroom chemistry, hiking, caving, collecting playing cards I find in the street.

CRAZIEST BUSINESS STUNT: Finding a (legal) piece of the moon, grinding it up and making a special commemorative Moon-Edition Thinking Putty.

FAVORITE BOOK: "Godel Escher Bach, an Eternal Golden Braid," by Douglas Hofstadter

FAVORITE MOVIE: "Fargo"

FAVORITE SONG: "Shine On You Crazy Diamond," Pink Floyd

FAVORITE SAYING: "And it's a beautiful day!"



Guardians, he warns:

"Ten lost treasures

are waiting to

be encountered along your quest,

but beware of the

collectible mini tin includes Thinking

Putty® and a guardian

charm with their own

unique persona."

protectors. Each







WALL OF SHAME



This sampling from the company's "Wall of Shame"—a tongue-in-cheek monument to infringers and rip-off artists—shows how some offenders even imitate the Crazy Aaron cartoon head. jobs, hope, and a uniquely satisfying form of teamwork. Handi-Crafters, which has packaged millions of tins of Crazy Aaron's Thinking Putty, recently honored Muderick with its Best Friend Award.

Pre-COVID, the company employed up to 800 such individuals to work at its offices in Norristown, Pennsylvania and around the Philadelphia area; that number is around 200 today. It seeks out social service agencies to

find prospective workers and instill a sense of purpose in their lives.

"We have people in a variety of positions because intellectual and physical disabilities can take many forms," Muderick says. "I don't look at people's medical histories when we hire them. They bring problem solving and added voices."

Their duties run the gamut, including assembling and shipping.

"There are certain tasks where you need two hands and fine motor skills. There are other

MORE PLAY, MORE DOUGH

Crazy Aaron's isn't just about the putty. Not since 2019, anyway.

That's when the company launched Land of Dough, which it calls the world's most eco-friendly dough. A kind of play dough reimagined, it features cups full of dough with only natural colors, ethically sourced ingredients, compostable glitter and eco-friendly packaging.

Land of Dough cups have multi-

layered designs and fun themes, such as Planet Earth and Over the Rainbow. Land of Dough wood play tools are included in the Rolling Patterns and Learning Numbers Kits. individuals who sort of have superhuman qualities, placing labels exactly straight and perfect every time—like, 'Don't talk to me. I'll do 5,000."

With so much at stake for so many, protecting the company is paramount. Patents aren't a part of that, but trademarks and trade secrets are.

Especially with putty, Muderick says the patent system was not the solution: "One, a lot of things have already been invented so it's hard to get patents and good claims. Two, you are responsible for the financial burden of protecting your patent—going after people. That is expensive."

He relies heavily on trade secrets but says they will only take you so far. "If someone figures it out, you're done." It's crucial to create and maintain strong branding—"sticking with it, really being mindful of the brand and how it is perceived by customers, whether it's the brand name or the Crazy Aaron head."

This is where trademark protection comes in, about 60 or 70 strong. His office has a "Wall of Shame" filled with copycats who did not even bother to change the Crazy Aaron cartoon head.

"The fun and whimsical names—those are the things most often copied and knocked off. But through trademark protection, we're able to protect and police the marketplace much more cost-effectively than we ever could with a patent."

Grassroots success endures

Always looking to help others, Muderick warns prospective inventors seeking quick riches that there are other, easier ways to go.

Real success is "starting grassroots and building slowly over time. One thing when I talk to inventors, everybody wants to make a product, go on 'Shark Tank,' and be a great success.

"I've been doing this for 26 years, right? And you and I are just talking now, right? You go low and slow, you have a good idea, you stick with it. ...

"By going through grassroots, you are able to build that kind of brand dominance so that people really expect what your company is delivering and it just seeps in through the cracks in the concrete, slowly over time."

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Think Positioning, Not Branding

WITH A FOCUS ON COMPETITIVE VALUE, POSITIONING IS FLUID, AND LESS COSTLY AND TIME CONSUMING BY ROB GELPHMAN

HAT OFTEN goes wrong with marketing campaigns can be traced to a disconnect between branding and positioning.

Too many times, an inventor or company pursues a branding campaign when it is positioning that is required. This can lead to a strategic error right out of the gate.

Many folks do not know the difference between the two. They think the two are synonymous. They are not.

Differentation is key

Think of brand as ubiquity, where everyone knows you. Position is value, where everyone wants you.

Brand's primary intent is to generate an emotional response from the intended audience where logical and legitimate product comparisons are difficult. These are also markets where price as in low—is the reigning purchase incentive.

Commodity-type products from multiple vendors with minimal differentiation are generally best served via branding. Think cable operators, cell phone service, banks and airlines, financial advisory services and real estate agents.

If price is the determining factor, that means there is no distinctive quality or set of attributes that differentiates the product from the others.

Smartphones are generally ready to go. There is nothing more to do. That is why handset manufacturers run ads promoting the increased pixels in the camera. What else are they going to promote? What else can you do with the smartphone?

Cars are generally ready to go. They all get you to the end destination, depending on the driver. To create a perception of increased value, and to justify a higher price, some cars offer more gadgets and gizmos than others. But electric headlight washers do not affect performance, comfort, or gas mileage. It is just more stuff that adds to prestige.

Wait a minute. What about Tesla and electric vehicles?

Great question. This addresses a very critical issue in that EVs do not require the capitalintensive extraction of oil. It differentiates based on less operational cost (or total cost of ownership, TCO) as no gasoline is required, and there are fewer moving parts that need to be replaced. The business model is based on battery life and not the combustion engine.

Tesla and other EV brands are positioning their cars based on innovation that solves a tangible, immediate and universal problem. Tesla has evolved into a brand but started with a position.

Branding ignores the why

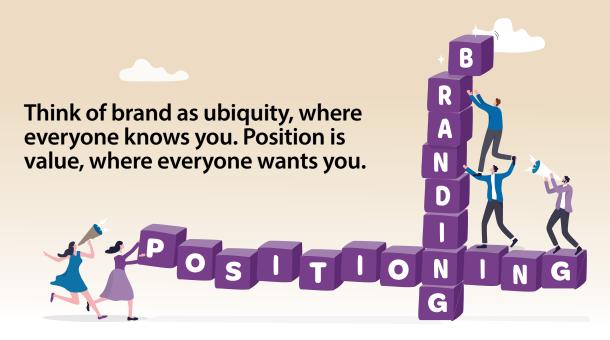
For some consumers, brand matters.

Branding is an emotional appeal, rather than a rational and logical description of why your product is better. Look around you. How many products and industries market their brand rather than position their competitive value?

It should be noted that the investment community is looking for a defensible, competitive position. It wants to see market analysis of a growing segment with a compound annual growth rate in the double digits. It also wants to see a competitive analysis that demonstrates tangible value over the other vendors.

Customers are investors, and investors are consumers. The former buys the product but also wants long-term viability. The latter buys equity and also wants long-term viability.

Both respond more favorably to a position statement than a branding campaign.



Brand provides recognition and awareness. Position helps the customer recite its attributes. Branding also takes time and money, which most startups do not have. Positioning can be done in a much shorter timeframe (months, not years) and is far less expensive and time consuming.

For many industries and companies, especially where constant innovation is the hallmark of the market and market windows close within six months or less, positioning—not branding—is the best strategy for improving sales and market share. Besides, branding is difficult to measure and does not always show up in the form of sales.

Insistence on pursuing a branding strategy without establishing an unassailable position is a strategic error. It will cost you in terms of cash and time—neither of which a startup can afford.

Flawless execution of bad strategy is still bad strategy. And a logo does not make a brand.

Many smaller companies assign themselves the Herculean task of creating and implementing a branding campaign. They should be picking the under-serviced but growing segments that their larger competitors are ignoring, and attack with an unassailable position and value proposition.

Positioning also forces management to accurately define its customer. There is no such thing as a mass market. Instead, focus on segments and niches with a position that is short, succinct, real, relevant and easy to remember.

Evolving with the market

The key to any successful marketing campaign is to demonstrate value. This is best done through

positioning, and that is equally true in good and bad economic times.

Positioning is dynamic and fluid. Yesterday's uniquely positioned company/product is today's commodity provider.

Useful positioning describes who the company is, what it wants to be when it grows up, and why anyone should care. It evolves with the market. If your positioning is still relevant several years later, you are likely in a very stagnant market.

Branding requires continuous bombardment with a particular message, repeated ad nauseam. Effective positioning makes the customer a part of the unpaid sales team.

Positioning leads to brand, but brand does not always lead to position.

Positioning is expected to change with the dynamics of the marketplace. The essence of a brand is to provide rock-solid stability.

More important, positioning leads to sales. And nothing validates a business model like a purchase order.

So, I ask you, why brand when positioning will do? Your comments, questions and disagreements are welcome. \odot

Rob Gelphman has spent more than 35 years in marketing, working with startups. He started an integrated marketing agency in 1993, including investor relations. He works with the Small Business Development Center as an adviser and with SCORE as a mentor, to startups and emerging businesses.



THINK MARKETING

Know The Affordability Barrier

THIS FINE LINE CAN MEAN THE DIFFERENCE BETWEEN NO SALES AND BIG ONES BY WILLIAM SEIDEL

HE Affordability Barrier is the price beyond which the customer believes he or she cannot afford, a key factor in pricing a product.

People will pay what they believe they can afford for the value the product provides. For example, with the claim "This putter will take three strokes off your game," are you willing to pay \$79.95, \$89.95 or \$99.95 for the benefits?

Most people get very confused with numbers. My brain tells me that \$20 is too much to pay for the product. I know \$19.95 is less than \$20. So, I pay tax, shipping, and handling and the total is \$27.44, but in most consumers' minds, they paid less than \$20 because that is the price they saw, what they can afford and what they want to believe.

Some prices sell better than others. The Affordability Barrier is not universal and influential in specific product categories. A small change in price may result in a large change in the sales.

For example, the classic price for a TV promoted product is \$19.95 and will make more revenue than, say, \$21.19 because it sells higher volume, and it creates more customers.

If the price reduction of 5 cents increases sales 10 percent, the cost to get additional sales is only 0.2 percent. If we assume sales of 10,000 units, then it costs \$500 in price reduction for a 10 percent increase in sales for an additional \$20,000 in revenue. That is smart marketing.

Marketers use clever mind tricks to make consumers believe they can afford it because it is less than \$20, or it was 30 percent off or two for the price of one.

"I got \$2,000 cash when I bought the car." It sounds like a good deal, but the chances are good that you are paying for it somewhere.

Testing can save big money

Learning what the customer will pay is a long testing process, usually only afforded by large companies with a marketing budget. Changes in demand, competition and customer perception can positively or negatively affect the price. Just consider the price increase of roses on Valentine's Day.

I have negotiated with inventors who insist on a high royalty or affixed dollar value for every product. If a high royalty pushes the price above the Affordability Barrier, the product will fail in testing.

For example, a two-minute TV spot uses the magic price of \$19.95 and if you need a high royalty pushing the price to \$22.35 (plus tax and shipping), the volume and revenue will be affected. Many stores are low-price-driven like Walmart, discounters and grocery stores. The shelves are enormously competitive, and customers compare prices at the point of purchase.

There are examples in Walmart and other stores where they appear to ignore The Affordability Barrier, but their premise and advertising is based on "Always Low Prices."

They are battling to win customers as the Low Price Leader. They will commonly undercut the TV price of \$19.95 at prices like \$17.50.

They carefully monitor the velocity of the sales and the financial advantages of the pricing. If the profit is too low or sales are indifferent to a lower price, they quickly adjust the price to maximize their profit on each product.

Most products fail in testing, and that is exactly why it is done. If it is going to fail, marketers and retailers need to know in small tests limiting a big national failure. The manufacturer, marketer and distributor need to project the sales before they make 100,000 units.

These tests are invisible to the customer and give you and the retailer volumes of information.

If you test one price and it fails, the only thing you know is that price failed. If you test a product at four different prices and two fail, one price point is marginal, and one sells big volumes, you have tests you can use to make well-informed decisions and accurate projections.

Elastic vs. inelastic

It is unfair to say the product failed when it may have been the price that failed, or the package, or the position in the store.

I had a client with a golf product that was profitable for TV sales at \$79. The client assumed that was the retail price because it was the lowest price. Clearly, the client was Bargain Basement Brainwashed.

The client wanted to test only the \$79.95 price. I insisted that we also test \$89.95, \$99.95 and \$119.95. This enraged the owners, who falsely assumed the \$79.95 price would sell more and the \$119.95 would never work and be a waste of testing money.

My client was right! The \$119.95 price sold 20 percent less than the \$79.95 price. However,

I was also right because the profit at \$119.95 was over three times greater for each club sold and contributed \$40 more directly to the bottom line.

The product sold fewer units and made much more money.

This is exactly the reason to test. This would be impossible to determine with surveys or focus groups.

"Elastic product demand" sees significant sales drops with price increases. "Inelastic product demand" maintains sales despite price changes.

It is inelastic when the demand does not change as the price changes. The dedicated golfer will pay \$20, \$30 or \$40 more to take three strokes off his or her game.

Products with an inelastic price of demand are preferred because they continue to sell regardless of price.

When the price of gas goes up, everyone using gas has to pay for it. We tend to see this when the product is innovative, has no competition or is a monopoly.

Last word

The bottom line is that pricing is critical and not based on the cost of the product. The price is based on what the customer can afford or believes he or she can afford. This is no place for opinions, assumptions, or guessing.

Understanding the Affordability Barrier is essential for businesses to effectively price their products. If you do not know what the customer is willing to pay, you run the risk of overpricing the product and alienating potential customers. Pricing below it may leave too much money on the table by not capturing the value perceived by customers.

When you know The Affordability Barrier, you can price the product just a little under the barrier. $\hat{\mathbf{v}}$

William Seidel is an author, educator, entrepreneur, innovator, and a courtapproved expert witness on marketing innovation. In his career and as the owner of America Invents, he has developed, licensed, and marketed billions of dollars of products.

MEANT TO INVENT

Let's Make a Deal

KEY FACTORS IN A LICENSING AGREEMENT MAY VARY IN IMPORTANCE, DEPENDING ON THE INVENTOR AND SITUATION BY APRIL MITCHELL

N OUR instant-results-obsessed world, many want to see their new idea licensed and on store shelves immediately after signing a contract.

How can we make things happen faster? What are the key components?

Is there a magic or master formula for licensing concepts faster?

I have experienced an array of timelines when pitching and licensing new concepts—from licensing an item to the first person I pitched it to, to licensing a concept within a month of pitching to dozens of companies, all the way to licensing a product after pitching it for a couple of years, and everything in-between.

Every instance featured three key common factors: time, list of potential licensees, and follow-ups.

Time

This commodity is so precious—something that can be well spent or wasted. What do you do with all your time?



Using time efficiently is especially important in the inventing industry.

The more time I put into finding more companies to add to my list of potential licensees, to reaching out to companies, pitching, and following up with them, the more I see the desired results—those licensing deals!

There will be times or seasons where things are a bit more hectic and you can't get as much work done, but decide what you can do and carve out that time.

I used to tell students I coached to make an appointment with themselves and put it on their calendar. That way, the time they set aside doesn't fill up with other things, because we all know how easily that can happen.

You wouldn't cancel on a friend or your boss, so don't cancel on yourself! Keep your appointment with yourself and get the work done. The more time you can commit to your projects, the better.

List of potential licensees

Creating your list of potential licensees takes a lot of time. There is much research: looking at websites, "shopping" in person and online to learn of companies already making products in the industry you are inventing for, and locating the best person to speak or meet with.

If you do not put in the time to do these things, you will have an amazing product but no one to present it to! When this happens, inventors tend to move to their next exciting project while their product that has a prototype and marketing material sits on the shelf.

I have always believed in the idea that there is always someone else to add to my list.

I am constantly on the lookout for new companies to present to, even if I have been pitching in the same industry for several years. I ask myself: "Who else can I share this idea with?"—and find them!

Following up

Often, inventors lose the possibility of signing a licensing agreement for a product because of their lack of follow-up. I am convinced that many or most of the deals I have signed are because of the follow-ups I do.

I mostly follow up over email but often will call companies, send a LinkedIn message, or even follow up in person at a trade show.

Once we are given permission to send our idea via email, submit to an online portal, or after we present our idea to a company, our job does not stop there. It is in our hands to communicate with companies that are reviewing our concept. We cannot control when or how often they will respond, but we can control when and how often we contact them and follow up.

Do not leave it up to the company to get back to you. Yes, some companies communicate amazingly well, but most people we are pitching to have a dozen other things going on and we are not their top priority—even if they love our idea.

If I do not follow up with a company, it is unlikely it will license it.

Yes, it has happened that a company was playtesting a game and before I could even see how the playtest went, it emailed to say it wanted to license it. Remember, though, that I had to follow up to get to the step where it wanted to playtest the game.

Is there a magic formula?

I am proof that by working hard, you can license a product in a month—or after two years. In either situation, the above-discussed factors of time, list of potential licensees, and follow-ups are the keys.

Regarding the product I licensed after two years of pitching: I took the time to keep adding to my list of companies and kept following up with them. And for the product that I licensed in a month, I pitched it to dozens of companies and had interest from several.

I put in the time on the front end pitching to the companies on my list and followed up.

So, no: There is no magic formula. Some things may take longer, but they are still worth it when you sign that licensing contract! \bullet

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



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Ouch! That One Stung

CONSIDER THESE STRATEGIES FOR LAUNCHING A PRODUCT SO IT DOES NOT MEET THE SAME FATE AS THE HORNET **BY JEREMY LOSAW**

N 2014, I created a new product and was ready to launch it. I spent months with my friend Brian Watson to build a new style of competition-grade, radio-controlled car.

We designed it, 3D-printed molds, made custom carbon fiber components and had a special body painted for the photos and videos. We called it the Hornet in homage to the city of Charlotte, where we live and which has an NBA team with the same name.

It was coming together perfectly. Then, the bottom fell out.

We posted the Vectorworks Hornet 1/12 Scale R/C Car on Kickstarter and raised only \$230.

At the same time, we took the car to the racetrack to show how amazing it was to other RC car enthusiasts. But instead of setting fast laps and winning races, it did barrel rolls and was hard to control.

It was a disaster of a launch and a large part of why we decided to cancel the project. I made some fundamental errors in my launch strategy and paid the price.

In this second part of a series on launching an invention or product, the following are some different platforms for launching physical products with strategies for each—so that your product does not suffer the same fate as the Hornet.

Crowdfunding

A popular choice for inventors to launch their products in the past decade, crowdfunding features platforms such as Kickstarter and Indiegogo that let creators share their projects and pre-sell products before having inventory in a warehouse ready to ship. However, a lot of inventors think that a crowdfunding campaign is a way to generate free money. Not true. It takes a lot of preparation and prework before the campaign to ensure the raise is successful. People are not naturally browsing crowdfunding for things to buy like they might on Amazon, so they have to be driven there. And once there, they need to be convinced to buy.

A key part of success when crowdfunding is to have a beautiful working prototype with highquality digital assets (photos and videos). The demographic tends to skew younger and male on crowdfunding, and high-quality content is key to gaining trust.

Another tip is to set a campaign goal less than what you really need to raise. This sounds counterintuitive, but people are less likely to back a campaign that has raised \$100,000 and is only 50 percent toward a \$200,000 goal than if it has raised \$100,000 and is five times above a \$20,000 goal.

People do not want to back losers, so high campaign goals are deadly.

It is also prudent to avoid trying to launch seasonal items. Yearly seasonal items, such as holiday items, or life-seasonal products such as baby products are needed quickly and not great for crowdfunding.

If you are in doubt about the right strategy, look into hiring a crowdfunding marketing agency.

Trade shows

These are a great way to launch a product into a targeted market. You will be surrounded by industry pros, and other startups in your category and can make meaningful contacts in the industry and with consumers.

Sales is a relationship-based business. Having a booth at a trade show puts you face to face with people on the show floor, where you can have a depth of conversation and live demos



that are not possible in a virtual environment.

It is crucial to spend time planning. First, choose one or more shows that best fit your product category. There are myriad shows throughout the year across the world for every product category: consumer electronics, pets, home goods, industrial automation, and more.

It helps to understand the fee structure and ensure that the cost of the booth, travel, "swag" and incidentals is within your budget and has good potential return on investment. Try to network with other showgoers and media to set up meetings beforehand to maximize your impact while on site.

Trade shows can be a time suck and draining, especially for the introverted innovator. However, the relationships you foster can help accelerate your sales and growth like nothing else can.

Social media

This is a fast and easy way to get eyes on your new product. Although most social media platforms are free to join and post, it takes a lot of work to build a following and make an impact.

The first step is to find which platforms most resonate in the product category for which you are going to launch. For example, house plant enthusiasts tend to be drawn to visual platforms such as Instagram and TikTok, so those are great places to interact with that community.

Then, monitor the conversation and see what other people and companies are doing with their A key part of success when crowdfunding is to have a beautiful working prototype with high-quality digital assets (photos and videos).

posts and engagement to get a feel for what is generating interest, and how you might finetune your digital assets.

Because social media is fast paced, be prepared to post regularly and intentionally. Before your launch, build a war chest of digital content to keep posts fresh.

It helps to map out a calendar to help stay on a regular schedule and capitalize on holidays and events such as Christmas, Arbor Day, Black History Month, International Women's Day—or any other relevant days on the calendar that you would like to highlight for your brand.

As you build organic traffic and followers, you can strategically deploy paid ads to get outside your core followers and drive traffic to your landing page or e-commerce site to capture the sale. \heartsuit

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







Goosing the Greed

INVENTORS WHO GET EXCITED BY BIG PATENT AWARDS SHOULD REALIZE THE RARITY OF SUCH CASES BY LOUIS CARBONNEAU

W EAT TANGIBLE IP get bombarded every day by inventors who want us to help them sell their one or two patents and expects to receive "several millions" (sometimes even billions) from their worthy invention, based primarily on reading some headline about a large patent verdict and thinking, naturally, "Why not me?"

I love large patent awards—mostly because I like to delude myself into thinking that these

SCOTUS POCUS

We witnessed another disappearing act from the U.S. Supreme Court when it rejected a petition by Vanda Pharmaceuticals seeking clarity on the standard for showing obviousness in patent cases.

Vanda's petition stemmed from a decision by the U.S. Court of Appeals for the Federal Circuit invalidating its patent. The CAFC cited evidence from clinical trials as indicating a reasonable expectation of success, a standard Vanda argued was too low compared to established precedent.

Vanda's petition was supported by amicus briefs from Salix Pharmaceuticals and advocacy groups representing visually impaired individuals, highlighting concerns about the impact on pharmaceutical innovation and patient access to treatments. will get a boardroom's attention and, just maybe, next time they infringe a portfolio, will reason that it is better to take a much cheaper license than to roll the dice in court.

Dream on, Louis!

We also witnessed two such recent verdicts that will no doubt fuel the "inventor's greed" of those who forget how rare these cases really are, or how often they get reduced or simply overturned.

So, here we go: On April 11, Amazon was slapped with a half-billion-dollar verdict in a case filed by Kove IO over some cloud software patents. Amazon has already indicated that it will appeal. So, no reason to get excited just yet.

Also reported were a few other—smaller verdicts against Samsung for \$142 million and another one for \$18 million, which took 11 years to conclude.

On this topic, ipwatchdog.com recently published a good article from Elizabeth Manno of Venable IP summarizing recent developments in patent damages that show some promise. ©

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



Apple won't give up: I commented extensively in previous columns on the *Apple vs. Massimo* situation and how this represents the worst example of "predatory infringement" from some Big Tech companies, Apple being Exhibit A.

After having lost at every stage in court and failing to convince the Biden Administration to give it a free pass, Apple is now trying—via its appeal and intense lobbying—to demolish the International Trade Commission rules that made it accountable in the first place.

This rather brazen assault is the last of many attempts to get away with serial copying of innovative technologies developed by much smaller technology outfits.

What Non-compete?

OMPETE

The U.S. Federal Trade Commission approved a final rule banning employers from using non-compete clauses for most workers. Existing non-competes for senior executives remain valid, but new ones are prohibited for all workers.

> The ban aims to increase wages and stimulate business innovation. The FTC maintains that the rule is necessary to prevent anticompetitive practices.

Commissioners cite the rule's potential to boost entrepreneurship and patent filings. Opponents, including the U.S. Chamber of Commerce, argue

that non-competes protect investments and promote workforce training. Concerns about trade secret protection and legislative overreach were raised by dissenting commissioners and industry experts.

The rule's legality is expected to be challenged in court, with potential implications for trade secret litigation and future regulations.

My take: I have been teaching startups for years about the fact that most IP leaks and trade secret theft comes from ex-employees who join a competitor or become one themselves. Until now, many were prevented (or delayed) from doing so due to their non-compete (California being the main exception).

This new rule, should it remain, will force companies to be a lot more disciplined about documenting, partitioning, and granting access to trade secrets, or they will likely regret it. It may also lead to more patent filings as they may be needed as a replacement for enforcing the non-compete, though patents may still be pending (thus unenforceable) in the short term.



We have been drowning lately in a flurry of reports about how AI will bring human civilization to its knees. Though many of these scenarios are extreme, there is no doubt that AI is already having an impact on many facets of society, and the world of IP is not exempt.

Here are a few examples of where we need to remain vigilant as AI tools and creations become more ubiquitous.

- **Protection of algorithmic assets:** Companies must secure patents and trade secrets to safeguard proprietary algorithms animating AI avatars.
- **Digital likeness and personality rights:** Obtaining licenses and defining their scope, duration and territoriality is crucial when AI avatars mirror real individuals.
- **Challenges of deepfake technology:** Establishing protocols and investing in technologies like digital watermarking can deter misuse and preserve content integrity.
- **Global IP rights management:** Managing IP across different legal jurisdictions requires strategic planning and adherence to international treaties.
- **Collaborative efforts and licensing:** Comprehensive licensing agreements are essential for managing collaborative frameworks involved in AI avatar development.
- **Copyright ownership of AI-created content:** Determining copyright ownership of AI-generated works necessitates legislative amendments and engagement in policy-making processes.

Evolving IP laws: Proactive advocacy and adaptation of IP legislation are crucial to address the unique challenges posed by AI technologies.

Companies that proactively address these IP challenges can navigate the AI-centric landscape effectively, shaping the evolution of IP norms and regulations in the digital age.



Are Laches Back?

There was a time where you had to be quite diligent before filing a lawsuit against an alleged patent Infringer, as you risked seeing your case dismissed based on the equitable doctrine of "laches." (*Editor's note:* This is a legal defense that may be claimed in a civil matter, which asserts there has been an unreasonable delay in pursu-

> ing the claim—i.e., filing the lawsuit—which has prejudiced the defendant or prevents the defendant from a defense.)

> Then, in 2017 in the SCA Hygiene Products case, the U.S. Supreme Court held that laches is no longer an available defense to patent infringement damages, even if a patentee "lies in wait" for more than six years before bringing suit.

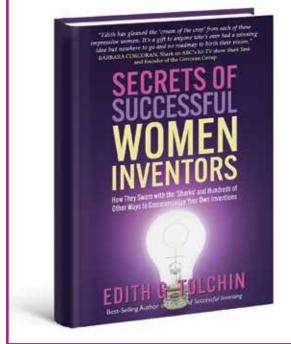
However, in a case opposing wireless speaker system company Sonos and Google last year, Senior District Judge William Alsup, sitting in the Northern District of California, breathed new life into the prosecution laches doctrine. This took a lot of people by surprise, given the foregoing background.

This case is now on appeal. Pundits on both sides are tracking it very closely. This could directly affect many current and future assertion plays and how patent owners prosecute their cases and file (or not) continuations in the United States.

Hope PREVAILs: With the help of some lobbying from the Medical Device Manufacturers Association and the Alliance of U.S. Startups and Inventors for Jobs, it looks like Congress might finally move the Promoting and Respecting Economically Vital American Innovation Leadership Act (PREVAIL) out of committee for a full vote.

Meanwhile, the USPTO has issued a Notice of Proposed Rulemaking relating to several changes to the Code of Federal Regulations as they pertain to patent challenges at the Patent Trial and Appeal Board that appear at first sight to be more friendly to patent owners.

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Edith G. Tolchin (photo by Amy Goldstein Photography)



Edie has interviewed over 100 inventors for her longtime column in *Inventors Digest* (www.edietolchin.com/portfolio). She has held a prestigious U.S. customs broker license since 2002. She has written five books, including the best-selling *Secrets* of *Successful Inventing* (2015), and *Fanny* on *Fire*, a recent finalist in the Foreword Reviews INDIE Book Awards.



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Uncertain Victory?

SCOTUS REJECTS 3-YEAR LIMIT ON COPYRIGHT DAMAGES BUT LEAVES TIME-ACCRUAL ISSUE UNDETERMINED BY EILEEN MCDERMOTT

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

HE U.S. SUPREME COURT recently rejected a three-year time limit on copyright damages but did not address when time begins accruing.

SCOTUS' ruling came in its May 9 decision on *Warner Chappell Music v. Nealy*, a case that asks whether a copyright plaintiff can recover damages for acts that allegedly occurred more than three years before the filing of a lawsuit.

Justices ruled, 6-3, that "the Copyright Act entitles a copyright owner to recover damages for any timely claim," with no limit preventing recovery for infringement that happened beyond three years. But as for when a claim for infringement "accrues," the court said it "assumes without deciding" that accrual occurs upon discovery of the infringement.

The case stems from a U.S. Court of Appeals for the 11th Circuit decision in February 2023,

which held that the discovery accrual rule allows plaintiffs to collect retrospective relief for infringements occurring outside of the Copyright Act's three-year limit against civil actions for infringement claims.

More than a dozen amici weighed in, including the U.S. solicitor general, who participated in the February oral arguments. The solicitor general backed Nealy and urged the court to affirm the circuit's interpretation of the high court's ruling in *Petrella v. Metro-Goldwyn-Mayer* (2013) over competing interpretations in the Second Circuit.

Petrella, at the heart of the circuit split on the discovery accrual rule, focused on the application of equitable laches to claims filed within the Copyright Act's statute of limitations. Since *Petrella*, circuit courts have been left to interpret whether *Petrella*'s holding requires strict adherence to the three-year limitation on recovery in cases where the discovery accrual rule applies.

The Supreme Court explained that its decision

The Supreme Court said it chose not to decide on accrual "because the issue was not properly presented in the case."

44 INVENTORS DIGEST INVENTORSDIGEST.COM

in Petrella does not support a three-year damages cap:

"There, the Court noted that the Copyright Act's statute of limitations allows plaintiffs "to gain retrospective relief running only three years back from" the filing of a suit. ... Taken out of context, that line might seem to address the issue here.

"But that statement merely described how the limitations provision worked in *Petrella*, where the plaintiff had long known of the defendant's infringing conduct and so could not avail herself of the discovery rule to sue for infringing acts more than three years old. The Court did not go beyond the case's facts to say that even if the limitations provision allows a claim for an earlier infringement, the plaintiff may not obtain monetary relief."

The court added that it chose not to decide "whether a copyright claim accrues when a plaintiff discovers or should have discovered an infringement, rather than when the infringement happened" because the issue was not properly presented in the case, since Warner Chappell did not challenge the 11th Circuit's use of the discovery rule.

Knobbe Martens partner Jeff Van Hoosear called the decision "a victory for copyright owners, and in particular individuals and small entities that own copyrights."

IP Watchdog founder and CEO Gene Quinn was quick to weigh in:

"The Supreme Court does it once again, with a clear-as-mud ruling that evades the most important question.

"It seems that what we know is that the Copyright Act requires a copyright infringement claim to be brought within three years. Three years from when? Uncertain and unanswered.

"The court also characteristically criticizes lower courts for literally reading and applying its own prior decision in *Petrella*.

"As far as I can tell, this opinion answers nothing." 📦

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



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www.lnventor-mentor.com Best wishes, Jack Lander

INVENTIVENESS

IoT Corner

The United Kingdom became the first country to ban easy-toguess user names and passwords for IoT devices.

The move aims to tighten network security by shutting down easy access to network resources through IoT devices. The legislation bans credentials like the user name "admin" and the password "12345."

A stated goal of the ban is to help consumers have better security for their home networks and data, and peace of mind that their new connected devices will not cause more harm than good. To date, no other countries have passed or are working on similar legislation.—*Jeremy Losaw*

Wunderkinds

Students from **Mahidol Wittayanusorn School (MWIT)** won six gold medals and a special award at the 6th World Invention Olympiad 2024 (WIOF) online International Innovation and Invention Competition on April 30. All six awards were in the chemistry field. A total of 92 teams from 12 countries participated. Established in 1990, MWIT is the first science and mathematics school in Thailand, providing specialized education for high school students who are exceptionally talented in science,

mathematics and technology.



What IS That?

These **vacuum cleaner shoes** from Japanese auto company Denso appeared at the 2017 Consumer Electronics Show. They are heavy, impractical, and didn't exactly sweep us off our feet.

Get Busy!

Head to beautiful downtown Burbank (California) on June 9 for Robo Toy Fest 2024, which has moved to a larger location to accommodate growing demand. **toycons.com/event/23308/ robo-toy-fest-2024**



WHAT DO YOU KNOW?

Which was invented first bifocals, or binoculars?

2 On June 4, 1963, Robert W. Patch became the youngest person to be granted a U.S. patent. How old was he? A) 1 B) 3 C) 6 D) 8

3 True or false: All confidential information is a trade secret.

4 A patent for the "window envelope" for letters was granted to H.F. Callahan on June 10 of what year?

A) 1870B) 1902C) 1931

D) 1961

5 True or false: There is no such thing as a provisional patent.

ANSWERS: 1. Bifocals by Benjamin Franklin in 1784; binoculars in the early 1600s. 2. C. His "Toy Truck" (U.S. Patent No. 3,091,888) application was signed with an X. 3. False. To be considered a trade secret, the business information must have economic value derived from not being generally known or easily discoverable; and be subject to reasonable efforts to maintain its secrecy. 4. B. 5. True. It's called a provisional patent application, and it is not automatically granted.

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