

Inventors

DIGEST

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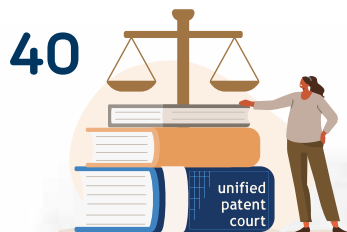
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They Said **What?**

12 Marlon, you're really getting some tough sounds from the conga there, boy."

35 First, they ignore you, then they say you're mad, then dangerous, then there's a pause, and then you can't find anyone who disagrees with you.

40 Once again, we are left trying to fix a mess the courts created where none existed before.



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Focus on the Fun and Fascinating

Fueling the Force of Innovation

National Academy for Inventors conference grows in reach and impact

Inclusive innovation is a force that is crucial for building a better world.

The 13th annual National Academy for Inventors (NAI) conference served as a reminder that inclusive innovation should be a shared goal for everyone. As Vaishali Udupa, USPTO commissioner for patents, said: “The USPTO is not just about the things we do to get your patent, but getting the people into that innovation ecosystem to spark that innovation, because it’s so important for our global economy, national security, so many different things.”

The NAI event, held June 16-18 in Raleigh, North Carolina, showcased a member organization comprising U.S. and international universities and governmental and nonprofit research institutes, with over 4,000 individual inventor members and Fellows spanning more than 250 institutions worldwide.

This year’s theme, “Unlocking Innovation: Keys to Societal Solutions,” addressed the subject of inclusive innovation through speakers and panelists from across the innovation ecosystem.

STEM challenges for women

USPTO Commissioner Udupa was part of a Next Generation panel that discussed how to engage younger intellectual property enthusiasts, inventors, innovators, scientists, and engineers. She provided examples of ongoing partnerships that aim to reach the next generation, including the Smithsonian “Change Your Game” exhibit; the

NAI GAIN mentorship program that connects seasoned academic inventors with collegiate innovators; and the National Inventors Hall of Fame’s Camp Invention—which had 400,000 participants last year.

A key to that future is enlightened and progressive STEM education, and the need to have women more actively involved. During a USPTO Women’s Entrepreneurship (WE) event, panelists discussed obstacles they faced—ranging from implicit bias to going to school in a war zone. They discussed action initiatives that included management strategies, mentoring, and creating safe space for honest and cathartic conversations.

Jamie Renee, executive director of the NAI, hosted the academy’s first livestreamed panel at the WE event: “From vision to value: Women impacting STEM through intellectual property.” One of her panelists was Carol Feghali-Bostwick, professor in the Department of Medicine at the Medical University of South Carolina.

Attending the American University of Beirut in Lebanon during the war in Iraq, Dr. Feghali-Bostwick “ended up having to change paths because it was not safe to cross over to the side where the medical school was.” After getting her doctorate from Tulane University with an emphasis in microbiology and immunology, she noticed “this implicit bias ... the influence that others have in making you feel as if you don’t have the capabilities or the abilities to see this through as an invention.”

She launched programs to provide entrepreneurship training for other women who may be struggling with the same issues.” She also promotes STEM in schools.

Panelist Almesha Campbell, assistant vice president for research and economic development at Jackson State University, added: “Often times, we don’t do implicit bias training. I think every department, every college, should have those trainings that are mandatory on their campus” to identify and correct those biases.

To see the entire WE discussion: bit.ly/3Ve2DQk

Panelists at a USPTO Women’s Entrepreneurship panel during the NAI conference were (left to right) Dr. Almesha Campbell, assistant vice president for research and economic development, Jackson State University; Dr. Carol Feghali-Bostwick, distinguished university professor, Medical University of South Carolina; Dr. Elizabeth Loboa, provost and vice president for Academic Affairs, Southern Methodist University; and Dr. Cassandra Quave, associate professor and assistant dean of research cores, Emory University.



PHOTO BY MARK SKALNY, MARK SKALNY PHOTOGRAPHY

DIRECTOR'S BLOG

Expanding Our Service Footprint

Progress continues on planned regional and community outreach offices in Atlanta and New Hampshire, respectively, prompting realignment **BY KATHI VIDAL**

Since I began my tenure over two years ago, the USPTO has worked feverishly to increase American innovation and entrepreneurship. As part of our efforts, we have expanded our footprint so we can better serve every community across the nation.

I am pleased to announce progress on our plans to open a regional outreach office in Atlanta, Georgia and a community outreach office in Strafford County, New Hampshire.

With the addition of the Atlanta office, we are reshaping the regions each office will serve. The changes, which will be effective upon the opening of the Atlanta office, are as follows:

- Our Northeast Regional Outreach Office in Alexandria, Virginia will serve outreach for Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia.
- Our Midwest Elijah J. McCoy Regional Outreach Office in Detroit, Michigan will serve Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Ohio, and Wisconsin.
- Our Southwest Regional Outreach Office in Dallas, Texas will serve Arkansas, Kansas, Louisiana, Mississippi, Missouri, New Mexico, Oklahoma, and Texas.
- Our Rocky Mountain Regional Outreach Office in Denver, Colorado will serve Colorado, Idaho, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming.
- Our Western Regional Outreach Office in San Jose, California will serve California, Nevada, Oregon, Washington, Arizona, Alaska, and Hawaii.

The new regional outreach office in Atlanta will serve Florida, Georgia, Mississippi, North Carolina, Puerto Rico, South Carolina, and Tennessee. The first community outreach office in Strafford County, New Hampshire, will serve



innovators and entrepreneurs in the northern New England region.

Our new regional and community outreach offices will serve as extensions of the agency's outreach operations by providing important resources and services directly to local inventors and entrepreneurs, including those from underserved areas or communities, and by collaborating with community organizations and local professional groups to enhance the reach of our intellectual property (IP) awareness and education programs.

The regional outreach office in Atlanta is expected to be fully open and operational by December 2025. We are also in the process of locating space for our Strafford County, New Hampshire office.

Our regional outreach offices will continue to serve as hubs for education and outreach as well as playing a key role in employee engagement and connecting our national remote workforce to one another. Our new community outreach office will provide intensive support and resources in a narrow geographic region to boost innovation and entrepreneurship, especially to underserved communities.

Kathi Vidal is under secretary of commerce for intellectual property and director of the United States Patent and Trademark Office.

The addition of a regional outreach office in Atlanta, planned to be open and fully operational by December 2025, prompted a reshaping of the regions each USPTO regional office will serve when it opens. The Western office will serve the U.S. area mapped in orange; Rocky Mountain, purple; Southwest, blue; Midwest, green; Southeast, yellow; and Northeast, red. The star represents USPTO headquarters in Alexandria, Virginia, with the new Strafford County, New Hampshire community outreach office designated at upper right.

JOURNEYS OF INNOVATION

Bringing Light for All

Known best for his work on the incandescent light bulb, Lewis Latimer brought electricity to millions while advocating for Black opportunities

BY BILL LINCICOME

The clip-clop of horseshoes and the slow creaking of carriage wheels on the tarmac streets of London welcomed two weary American travelers after more than one month at sea on New Year's Day, 1882. Accompanied by his wife, 33-year-old Lewis Latimer arrived with a daunting task before him: the electrified illumination of a city famous for its fog.

The Maxim-Weston Electric Light Co. had recently acquired a factory to produce incandescent light bulbs, and Latimer, an inventor and electricity expert, was to teach the production process to its workers.



Latimer fought racial prejudice throughout North America and England in the 1880s as he brought light to millions, from New York and Philadelphia to Montreal and London.

Traveling to the factory—located off the Thames at Bankside—he arrived to find it dilapidated: copper wires strewn about the factory floor; windows covered thick with dirt as to not allow light to penetrate; rust patches on the milling machine, the result of rainwater from a leaky roof.

While the factory conditions presented challenges, it was the collective mentality of the workers that cast the darkest shadow during Latimer's time in the United Kingdom's capital city.

In the nine months he spent on this assignment, it became clear that many workers Latimer was charged with training resented having a Black man supervise their work. He wrote that he was “in hot water from the first moment to the end.”

Latimer encountered similar treatment throughout North America and England in the

1880s as he brought light to millions from New York and Philadelphia to Montreal and London.

Undeterred, he used his childhood experiences, military training, and innovative spirit to leave an indelible mark on the world, both in delivering the tangible benefits of electricity and in his advocacy for increased educational and occupational opportunities for Black people.

His rise to fame began modestly.

Following his honorable discharge from the U.S. Navy at the end of the Civil War in 1865, Lewis was hired as an office boy at Crosby, Haltsted, and Gould, a Boston patent law firm, for \$3 per week. In addition to his job duties, Latimer took it upon himself to read and observe the firm's draftsman.

Eventually, he used this knowledge to teach himself mechanical drawing and drafting. The firm's partners made Latimer their draftsman when the incumbent resigned. Although Latimer was pleased with his salary increase from \$3 to \$20 per week, he was paid \$5 less than the previous draftsman.

During the next decade, Latimer used his growing set of skills to sketch and draft his own patents as well as those of other famous inventors. In 1874, Latimer filed his first patent, an improved toilet system on railroad cars (U.S. Patent No. 147,363), along with Charles W. Brown.

Two years later, he played an important role in helping another fellow innovator—Alexander Graham Bell—patent his invention.

Bell hired Latimer to draw plans for the telephone, filing his patent mere hours before his main competitor on February 14, 1876.

This high-profile achievement earned Latimer the opportunity to join the ranks of U.S. innovators on the cutting edge of technology.

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

August 16-17: All Things Inventing

Plan to attend Invention-Con, the USPTO's annual showcase on IP education, inspiration and networking

Your chance to learn from and meet some of the world's most accomplished inventors and entrepreneurs is coming up at Invention-Con 2024.

The free, annual event at the United States Patent and Trademark Office (USPTO) headquarters in Alexandria, Virginia, will feature online and in-person sessions. Learn how intellectual property (IP) is crucial to your success, and how to make patents and trademarks give your invention protection and added value. Find out about the latest valuable resources and business strategies. Connect with some of the most accomplished and influential inventors and innovators.

Virtual and in-person panels and sessions on Friday, August 16 will include:

- “Why IP is beneficial to innovators and companies alike.” Learn why companies and independent innovators should work together to find the market's next big hit products.
- “The spark of creativity.” Hear how innovators' experiences inspired innovations that became commercialized products.

- “Monetizing your IP through licensing.” Learn from a panel of experienced experts about the initial ins and outs of licensing your intellectual property.
- “Practical AI: Solving real world problems.” Discover how public and private institutions are using artificial intelligence (AI) to provide business solutions. Hear what investors are looking for in AI startups.

In-person networking sessions will be available before and after the Friday panels, giving you the chance to talk with IP experts and get answers to your patent and trademark questions.

Saturday, August 17, will feature an in-person only USPTO headquarters open house and resource fair. Talk with patent and trademark subject matter experts, tour the Public Search Facility, and learn more about free resources.

For more information, contact inventioncon@uspto.gov, and keep current on planned activities by visiting uspto.gov/inventioncon.



NEWS FLASH

RASHEED NAMED CHIEF SOLICITOR FOR IP LAW: Farheena Y. Rasheed has been appointed deputy general counsel for intellectual property law and solicitor by the USPTO.

The Office of the Solicitor serves as legal counsel to the USPTO on intellectual property law and works in collaboration with the Department of Commerce on interagency intellectual property law matters, as well as with the Department of Justice in advocacy before all U.S. courts.

Rasheed will serve as the chief litigator for the USPTO and carry out the strategic direction of Kathi Vidal, the under secretary of commerce for intellectual property and director of the USPTO, through advocacy and defense of USPTO actions in the U.S. judicial system. “I look forward



to thinking more broadly about our litigation strategies across judicial forums to help shape the intellectual property landscape, supporting the director's vision of strong, reliable IP rights and advancing the agency's mission to foster American ingenuity, entrepreneurship, and innovation through science, technology, and the useful arts,” Rasheed said.

She joined the USPTO Solicitors Office in 2010 as an associate solicitor for patent litigation, most recently serving as acting solicitor. In that time, Rasheed has led the USPTO's work in appeals of Patent Trial and Appeal Board proceedings in federal court, defended the USPTO in statutory, regulatory, and constitutional challenges, and played a role in the development of USPTO rules, guidelines, and policies.

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Stalled Driverless Cars An Important Reminder



So, how's that driverless car thing going?

Picture yourself on an L.A. freeway at 5 p.m. on a Friday.

Driverless cars are evolving slowly. In mid-July, Kentucky joined 24 other U.S. states that have authorized the testing and use of autonomous vehicles since 2012, according to the Autonomous Vehicle Industry Association. Many require a human backup driver. San Francisco residents can hail a driverless Waymo taxirobot ride.

There is still a long way to go before driverless cars are mainstream. Pie-in-the-sky forecasts have largely been half baked.

Elon Musk said a Tesla would self-drive across America in 2017. But Elon Musk also said he is an alien, and that patents are for the weak.

The lack of an imminent ETA for autonomous vehicles as the rule, not the exception, is a reminder that even in a world where microscopic transistors allow us to have the internet in the palm of our hands, high-tech progress is not immune to roadblocks. And that the human element remains a factor.

Studies routinely show that virtually all accidents, including those involving driverless cars, are caused by human error. Still, driverless cars can struggle to recognize pedestrians and have trouble "seeing" in bad weather.

They are also limited by their programming, which tells them to stay in their lane and avoid collisions with objects. Great—until that directive to hit the brakes and avoid hitting something results in being rammed from behind.

When an autonomous vehicle is in an accident, is the car company liable, or the backup human driver? And in an instantaneous situation where the choice is hitting a child standing by the road or swerving and hitting other people, what decision can and should an autonomous car make?

Inventions are usually meant to solve problems. Driverless cars can do that, arguably making roads safer by dramatically reducing human error.

But the creation of new problems while trying to solve other ones can make inventing an added challenge.

—Reid
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Inventors

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CORRESPONDENCE

Off-the-Cuff Discovery"

(January 2023)

What an awesome article! I was appalled that men still treat women with such disrespect.

That said, I am a service-connected disabled vet who is retired from being an occupational therapist. I can relate to a lot of these ladies' trials and tribulations when it comes to adaptive equipment. I have so many questions for them concerning their inventions and patents. I will email them personally.

Thank you for such a heart-warming article. Keep up the good work. God bless you and yours. —THOMAS SEDGWICK

Thanks, Thomas. (His opening comment referred to the fact that the women who invented the EaZyHold, a gripping aid, were told by five highly recommended male patent attorneys that their product wasn't patentable. When they got a female patent attorney, they had a patent within 18 months.)—Editor



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

SOMETHING STINKS WITH OPENAI

News reporters have been known to go to jail rather than divulge their sources or notes. So as OpenAI defends itself against the *New York Times* in a copyright infringement case, its request that the paper turn over reporters' "notes, interview memos, records of materials cited, or other files for each asserted work" is a sign this dispute won't end anytime soon.

The *Times* sued OpenAI and Microsoft in 2023 over ChatGPT, OpenAI's flagship product—which tech blog Gizmodo calls "a plagiarism machine." The large language model remixes written text that resembles the original.

OpenAI said it would be satisfied

with all notes, interview memos and records of material cited related to about 10 million stories. Obviously, reporters' record-keeping habits vary wildly and are not required to be uniform. And such a task would certainly take years.

Observers speculate the OpenAI request is designed to delay the trial and force the paper to spend more on attorney fees, possibly to the point of surrender. The Associated Press, Axel Springer and *The Atlantic* have made settlements with OpenAI.

Around the same time OpenAI's demand was made public, it was reported that the \$27 million luxury mansion OpenAI CEO Sam Altman

bought in San Francisco in 2020 is riddled with mold. Whether or not you're a fan of the *New York Times*, you have to think some of its reporters shared a chuckle.—Reid Creager

The New York Times



CORRECTION: In the July 2024 *Everybody's Talking*, an editor's note said Linda Ronstadt has Parkinson's disease. Although that was widely reported initially, it turned out she has progressive supranuclear palsy, which is similar to Parkinson's with no known cure.

BRIGHT IDEAS

Iris LF

CIRCLE DRAWING TOOL
makerscabinet.com

Practical and visually appealing, Iris Large Format is the latest iteration of the original, growing to 4.7 inches in diameter with an improved design.

To use, simply rotate the rings to open and close its aperture mechanism.

Iris features a scale with a distinctive red arrow so you can easily read the circle diameter without extra tools. A rubber mat ensures a secure grip on your page.

The rings are precision machined from solid brass, which will develop a beautiful patina over time. The leaves are resistant to ink and graphite. With a future retail price of \$290, Iris LF will ship to crowdfunding backers in December.



Goovis Art

EXTENDED 3D VIEWER
FOR MULTI-TASKING
goovis.net

Goovis Art is a comparatively lightweight head-mounted display that enables multi-dimensional collaboration.

The AR glasses are unrestricted by location or posture, and enable multitasking. The product's primary feature is a "hanging design" that includes an arm-like mechanism you can flip down, allowing you to enjoy your private cinema. It also offers a highly adjustable viewing angle that caters to various viewing preferences.

Its makers claim Goovis Art offers wider peripheral vision than traditional AR glasses. It is equipped with micro OLED screens and 1,920 times 1,080 pixels per eye.

Goovis Art will retail for \$699.



Clicks

MULTI-FEATURED KEYBOARD FOR IPHONE

clicks.tech

Clicks gives your iPhone keyboard more screen, new ways to create, and shortcuts.

Slide your iPhone into Clicks to unlock the benefits of buttons for creating on the move: opening screen space for apps and content such as chats, browsing the internet, and engaging on social media.

Keyboard shortcuts and dedicated keys cut down on swipes and steps. Connect with Lightning or USB-C for normal wired charging.

The Clicks app simplifies managing your keyboard settings and ensures everything is up to date. Clicks is available for only the iPhone 14 Pro, iPhone 15 Pro, and iPhone 15 Pro Max. It retails for \$159.



“Fear is the disease. Hustle is the antidote.” —TRAVIS KALANICK

MOFT Snap Flow

COMPACT IDEA ORGANIZER FOR BACK OF PHONE

moft.us

MOFT calls itself “a minimalist focus tool with pen, paper, organizer, and stand to capture ideas” that fits on the back of your phone without your having to open it.

Extremely portable at 7.56mm and 62g, the analog accessory features three dedicated zones for brain dumping ideas, noting key to-do lists, and capturing core notes. Its tri-fold pen is unseen when attached, unfelt when worked on, and unnoticed when carried.

MOFT also magnetically detaches from your phone and folds up as a reminder board. It will retail for \$49, with a planned September shipping for crowdfunding backers.



Godfather of ... the Conga Drum?

ICONOCLASTIC HOLLYWOOD LEGEND MARLON BRANDO
HAD BIG PLANS FOR HIS TUNING SYSTEM **BY REID CREAGER**

MARLON BRANDO traveled to the beat of a different drum in more ways than one.

The iconic actor and star of “The Godfather” was quirky, enigmatic, unashamedly rebellious—highlighted by his sending Native American activist Sacheen Littlefeather to the podium at the 1973 Academy Awards to decline his Oscar in protest of how Indians are treated on film.

Brando was also passionate about the conga drum, often playing it between takes on set. He demonstrated his skills during an interview with Edward R. Murrow in 1953, playing alongside jazz drummer Jack Costanzo.

But most important for our *Inventors Digest* audience—drum roll, please—he had five patents in connection with a drum tuning system in 2002-2003 (not four, as often reported).

Brando spoke with Ed Sullivan about his hobby in 1955, in a conversation that only could have taken place in 1955. (Great stuff when you’re plunging down the YouTube rabbit hole.)

Sullivan: “Marlon, you’re really getting some tough sounds from the conga there, boy.”

Brando: “Well, I see by your words you’re down on the scene yourself.”

Sullivan: “Well, cat, I’m in there pitching all the time and very observant.”

Brando: “Well, crazy!”

Brando told Sullivan his interest in rhythm dated to when he grew up on a farm and liked listening to the rhythm of a

The star’s innovation was replacing the five or six bolts around the head of the conga with a linkage system at the bottom of the drum, connected by a single lever.



donkey engine. When Sullivan asked what a “dunkey” engine sounded like, Brando tried to replicate the sound.

Soulful survivor

There was no replicating Marlon Brando. His unconventional interests in inventing also included special shoes to use in a pool for a better underwater workout. Patent attorney Kevin Costanza said Brando read the magazine *Scientific American* religiously.

According to a 2011 National Public Radio story by Los Angeles deejay Felix Contreras, Brando spent more than five years working with Costanza on schematic drawings for the drum tuning system. The star’s innovation was replacing the five or six bolts around the head of the conga with a linkage system at the bottom of the drum, connected by a single lever.

Brando died in 2004, less than a year after his final patent was approved. That ended efforts to license his design to manufacturers. Another possible reason the system never caught on was that it would be expensive for companies to manufacture.

The 2011 story—which chronicled visiting some Brando artifacts in a ubiquitous West LA storage facility—reported that only one of Brando’s prototypes remained, with the other instruments and patents lost or destroyed. Grammy-winning Latin jazz percussionist Poncho Sanchez, who met Brando in the late 1970s, was excited to see how the surviving prototype would work.

“Costanza turned the crank on the side of the drum connected to the linkage inside, while Sanchez tested the tone,” the story said. “Soon, the drum was ready for a test drive.”

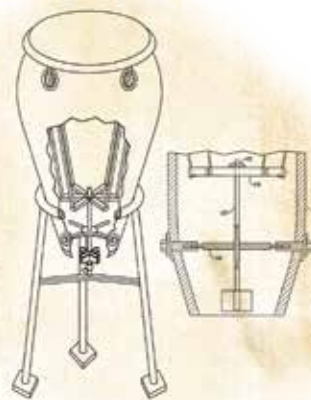
Brando would have been thrilled.

The story never said how the experiment played out, a cliffhanger. The mysterious Brando might have been thrilled by that as well. 🎧

PATENT PATHWAY



All of Brando’s five patents are titled “Drumhead tensioning device and method.” The first was **U.S. Patent No. 6,410,833**, granted on June 25, 2002. The Abstract (description) reads: “In a tunable drum, a connector member in the drum is attached by cables to a tuning ring, and is threadedly coupled by a tuning linkage to a retaining member fixed to the drum. Rotation of the tuning linkage with respect to the drum moves the connector member longitudinally and, as a result, adjusts the tension of the drumhead.”



INVENTOR ARCHIVES: AUGUST

August 4, 1755: Nicolas Jacques Conté, a French chemist, balloonist and army officer who developed the modern pencil, was born.

As Thomas Edison is often incorrectly credited with inventing the light bulb, Conté is often incorrectly credited with inventing the pencil. He invented an improved process that combined clay and graphite in variable proportions to adjust for harshness and darkness—the basis for the modern pencil.

Earlier pencils were pure graphite. Graphite sticks were used in drawing and carpentry pencils.

A stylus—a thin, metal rod used for writing on papyrus in ancient Rome—is the earliest known predecessor to the pencil.

Conté also invented the first engraving machine, in 1803, for a voluminous work on Egypt commissioned by Napoleon.



Patent Search Options

CONSIDER THESE 5 ALTERNATIVES IF YOU HAVE NO EXPERIENCE LOOKING FOR PRIOR ART **BY JACK LANDER**

SEARCHING FOR prior art (existing patents) is a pain in the butt for most of us. I have found it to be so after trying many ways to make it easy and pleasant.

If you do your own patent search without much experience, you probably will not find the prior art the patent examiner will find during searching. This will result in the rejection of your patent application if you file it on your own.

OK, so you'll have a patent attorney do your search, thinking it will give you a definite answer as to whether conflicting prior art exists. Such a search will decrease your odds of your patent application rejection, but still with no guarantee.

- Hire a patent attorney. Order a search and patentability opinion. If the result is favorable, hire the attorney to prepare and file your patent application. (The typical procedure.)
- Study a book on how to search, and proceed to a professional search whether or not you find potentially disqualifying prior art from your own search. Give the results of your search to your professional searcher and ask for comments.
- Enroll in a patent preparation and filing course such as Patent Hacks. I have no direct experience with this course, but from the materials offered on its website I believe it could be very helpful.
- Study a book on how to write and file your own patent application, then proceed.
- Order a search and patentability opinion. Assuming there is no patent found on an invention like yours, proceed to produce and market your invention.

Before considering any of these alternatives, consider the pros and cons.

Option 1 assumes you have the money to pay for the professional search (\$1,000 to \$2,000), for the professional patent application (\$5,000 to \$15,000) and that you have carefully considered the probability that you will be able to market your patent, or sell your product if you decide to produce and market it.

Regarding Option 2, comparing your search with the results of a professional search will polish your ability to conduct reliable future searches. Nolo Publishing's 7th edition of "Patent Searching Made Easy" is available on Amazon. Don't buy older, used editions. They are much cheaper but probably don't include current information.

As for Option 3: The price to enroll in Patent Hacks is \$500, but this is reasonable if you learn enough to avoid hiring searchers and patent

Comparing your search with the results of a professional search will polish your ability to conduct reliable future searches.

Even if the search turns up the entire prior art that could hurt your chances of getting the patent, there may be a difference of opinion about whether such prior art disqualifies your application. In such cases, you need a patent attorney to present your argument. And in any case, the patent examiner has the final word on the potential of prior art to affect the decision to accept or reject your application.

At that point, you may have spent several thousand dollars to find that your invention is not novel and not patentable.

Options and observations

So, back to the beginning. Before you do your own search, consider these five alternatives:





application writers. Consider that the typical cost of one professional search is about three times the cost of the Patent Hacks program—which includes 500 examples, 50 guides, 30 templates and 200 definitions.

Option 4 requires learning and practice, but you will also have the “hand-holding” of the patent examiner. Most examiners are willing to explain why they have rejected your application and suggest ways for you to improve it. Amazon stocks Nolo Publishing’s excellent book, “Patent It Yourself,” which I have owned—and used several editions over the years.

As for Option 5, you don’t need a patent to proceed to manufacture. However, you run the risk of infringing on a still-in-force patent. (A utility patent has a 20-year life.)

What if you infringed?

Infringing will not result in solitary confinement. There is a good chance you will never hear from anyone. Well-established businesses worry about major competitors, not about hunting down very small businesses using one of their patent claims in a way that doesn’t cut into their profit.

If you do hear from a patent holder who says you’ve infringed his or her patent, typically you receive a notice from a lawyer advising you of your infringement and what action you take. At worst, you will probably be advised to stop producing and meet with his or her client at the

attorney’s office. Such meetings generally are not hostile but are, in essence, bargaining sessions.

If you are a small producer, the cost of permission to maintain your use of their patent claim may only be a royalty fee that is affordable. At worst, there may be a demand for past royalties owed. The smart strategy is to provide for this by setting up “infringement self-insurance”—a bank savings account—and depositing self-imposed royalties based on, say, 10 percent of your sales. (Most royalties are lower than 10 percent.)

At the bargaining meeting, ask your adversary what percentage of sales he or she would have charged if you would have known about the patent with a claim that you have used in your invention, and would have agreed to pay royalties. Don’t reveal that you had set your self-imposed royalty rate as 10 percent of sales. The usual royalty is around 5 percent.

If all goes well, you’ll probably not be contacted, and you’ll end up with a lot of money from your “infringement self-insurance” bank account.

Hmmm. How about a financial partnership with me? I still have a ton of ideas, some of which may be patentable. ☎

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.



Going Communal on Facebook

WHETHER VIA A PAGE, GROUP OR BOTH, HERE'S HOW TO BUILD COMMUNITY AROUND YOUR INVENTION **BY ELIZABETH BREEDLOVE**

CREATING a community around your invention or innovation has never been easier.

Last month, this column covered using LinkedIn Groups to share and improve your invention. But Facebook, with its massive user base and diverse set of tools, also offers fertile ground for inventors and entrepreneurs to build and nurture a dedicated following.

This article will guide you through the process of creating and managing a Facebook page or group dedicated to your invention, ensuring you can maximize engagement and foster a thriving community.

Here is why Facebook is an ideal platform for building a community around your invention.

- **Massive user base:** With more than 3 billion monthly active users, Facebook provides a vast potential audience for your invention.
- **Diverse demographics:** Facebook's user base spans all age groups, professions and interests, making it easier to reach your target audience.

- **Rich features:** From pages and groups to events and advertising, Facebook offers a plethora of features to connect with your audience.
- **Engagement tools:** Facebook's algorithms and tools are designed to enhance engagement, allowing you to interact with your audience effectively.

Creating your page or group

Before choosing between a Facebook page or a group, define your goals.

Are you looking to generate awareness, drive sales, gather feedback, or build a community of like-minded individuals? Your goals will dictate the type of content you post and the way you engage with your audience.

A page and group have different features and advantages.

A Facebook page is ideal for brands, businesses and public figures; allows for public visibility and search engine optimization benefits; provides

SETUP INSTRUCTIONS

For a Facebook page

1. Go to the Facebook homepage, open the menu bar in the top right corner, then click on "Create" and select "Page."
2. Choose "Business or Brand" and click "Get Started."
3. Enter your page name (your invention's name) and category.
4. Add a profile picture (e.g., your logo) and a cover photo (a picture of your invention in action).
5. Complete the "About" section with a compelling description of your invention, including its purpose, features and benefits.
6. Customize your page with additional tabs and settings as needed.



For a Facebook group

1. Go to the Facebook homepage, open the menu bar in the top right corner, then click on "Create" and select "Page."
2. Enter your group name (consider including your invention's name).
3. Choose the privacy setting (public, closed or secret).
4. Add some initial members (friends, colleagues or early adopters).
5. Complete the "About" section with information about your invention and the group's purpose.
6. Customize your group with a cover photo, tags, and settings as needed.



access to Facebook Ads and Insights, and is best for broadcasting information and updates.

Facebook groups are best for fostering community and discussion; can be public, closed or secret; encourage interaction and engagement among members, and are suitable for support groups, beta testers, or fan communities.

If you have the ability to manage more than one channel, consider starting with both a page and a group to leverage the benefits of each. Your page can serve as the public face of your invention, while the group can provide a space for more intimate, interactive discussions.

Building your community

Your first step is to create engaging content, which is the backbone of any successful Facebook community. To keep your audience engaged, consistently post high-quality, relevant content. Some tips:

- Use high-quality images and videos. Demonstrations, tutorials and behind-the-scenes footage can be particularly engaging.
- Encourage users to share experiences and content related to your invention. This can build a sense of community and provide authentic testimonials.
- Share articles, blog posts and infographics that provide value to your audience. This could include industry news, tips and tricks related to your invention.
- Polls, quizzes and live videos can significantly boost engagement. Consider hosting Q&A sessions or live demonstrations to interact with your audience in real-time.

Your goals will dictate the type of content you post and the way you engage with your audience.

Fostering interaction within your community is a key to success. Here's how:

- Ask questions in your posts to spark conversations. For example, "How do you use our invention in your daily life?"
- Respond to comments on your posts promptly and thoughtfully. Show appreciation for feedback and address questions or concerns.
- Organize virtual or in-person events such as webinars, product launches or meet-and-greets. Use Facebook Events to promote these gatherings.
- Acknowledge and reward your most active members. This could be through shoutouts, badges, or exclusive content.

Facebook offers a variety of tools to help you manage and grow your community, including:

- Facebook Insights, to track the performance of your posts, understand your audience demographics and identify trends.
- Facebook Ads, which are targeted ads to reach a broader audience. Facebook's detailed targeting options allow you to reach people based on demographics, interests and behaviors.
- Facebook Live, where you can engage with your audience in real-time. Live videos often receive higher engagement than regular posts.

- Pinned Posts, where you can pin important announcements or high-engagement posts to the top of your page or group.

Managing your community

Establish clear guidelines to help maintain a positive and respectful community environment. Outline rules for behavior, content sharing and engagement. Ensure these guidelines are visible to all members and consistently enforced. Facebook even allows you to

require acknowledgement of rules before members can join the group. Effective moderation is crucial for maintaining a healthy community. Assign moderators if necessary to help manage the group. Monitor posts and comments for spam, inappropriate content and rule violations. Address issues promptly and fairly.



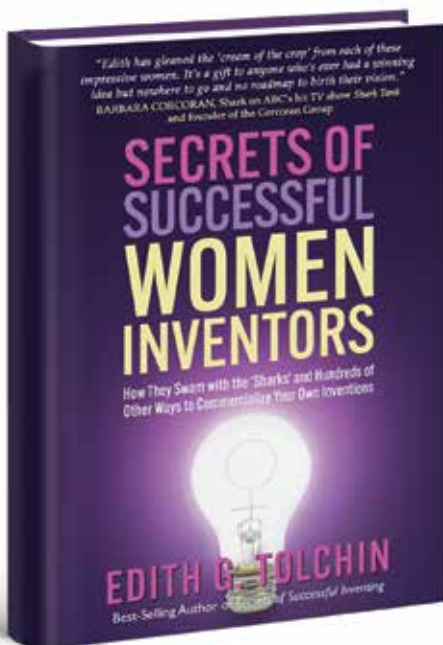
Regularly seek feedback from your community to understand their needs and preferences. This can be done through surveys, polls or direct conversations. Use this feedback to improve your invention and the overall community experience.

Your community will evolve over time, and so should your approach. Stay updated on Facebook's features and best practices, as these often change, too, with algorithm updates. Be willing to experiment with new types of content and engagement strategies, and adapt to the changing needs and interests of your community. 📱

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.



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Edith G. Tolchin
(photo by Amy Goldstein Photography)

Edith G. Tolchin knows inventors!

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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Understanding Improvement Patents

ADDING ON TO A PATENTED ITEM CAN BE INFRINGEMENT IN SOME CASES **DON DEBELAK**

THE AREA of improvement patents, either product or method, is one of the most misunderstood categories of patents.

With an improvement patent, you add improvements to a previously patented invention. If you are not the owner of the previous patent, you might be able to get a patent but not be able to sell the product related to the patent because you would be infringing on the original patent.

It is important for patent holders to understand this area of patent law.

Know what rights you have

People get a patent by having something that is conceptually different from what has already been done (or described in a published document), and not obvious in light of what has already been done or published. However, getting a patent does not give you the right to make something; it gives you the right to try to stop somebody else from making something.

Infringing on a patent means making, selling, or importing something that falls under the definition of a patent as expressed in its claims.

If an invention does not need an element that is set out in another patent's independent claim, there is probably not infringement. If you "add on" an element to something that is patented, presumably your product has all of the elements of the patented item and therefore infringes on the original patent, even though you have patented the improvements.

Sometimes, an improved product can only be sold with a license from the patent owner of the original item.

How to stay safe

Pharmaceutical companies get a lot of criticism for their add-on patents because they keep extending the life of their patents. But that is the only way a patent holder can prevent

someone else from patenting an improvement to the original product.

The best route for a patent holder is to keep adding your own improvement patents.

What does this mean for an inventor who has a product improvement idea for an existing, patented idea?

First, see if you can eliminate an item in the independent claims of the existing patent. That might allow you to get a patent and sell your product or process without infringing.

If you can't eliminate something, you can patent your idea and hope the original patent holder will license or buy your patent.

Stay vigilant, aggressive

The United States' first-to-file patent orientation is a factor that plays into both patent holders and individuals with a product improvement idea. The first person to file has the right to patent an improvement.

That means patent holders with a successful or promising product or method need to have an aggressive posture on patenting product or method improvements. They also have to disregard the one-year grace period to file for a patent, because the grace period is not safe with a successful product.

Patent holders can't afford to introduce or disclose product improvements in any way without first patenting the concept. 📌



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



Sports With a **New Feel**

GAME PLAY DEVICE LETS VISUALLY IMPAIRED PEOPLE FOLLOW THE EVENT THROUGH VIBRATION **BY JEREMY LOSAW**

JERRED MACE wants to bring the camaraderie and feel of watching live sports events to visually impaired people. His idea to provide this through a tactile experience has the potential to touch thousands.

OneCourt is a device that allows visually impaired people to follow a sporting event through vibration. Built in the shape of a field, it ingests real-time data from the event and turns it into vibrations that allow the user to feel what is going on and where the ball is.

OneCourt can be used live in a stadium or at home while watching a live broadcast. The device is currently in pilot and will be fully launched later this year or early next.

Soccer game kickstart

Mace stumbled upon haptic technology at the University of Washington, where he studied industrial design. He came across a video of a person helping a blind person at a soccer match

by moving the blind person's hands across a game board to represent the moves on the field to communicate what was happening in the game.

"It was through touch that he was gaining really immediate and meaningful access to this live and dynamic information. That really stuck out to me," Mace said.

He became obsessed with how to use touch to experience sporting events. He found others on campus who were interested in the project, and they set about building some prototypes.

The first embodiments used Arduino—an open-source electronics platform that uses hardware and software to create interactive products—to provide vibrations to determine whether it was possible to represent spatial information. His team built a 4-by-4 grid and had people test how well they could use the vibration to interpret ball position from a tennis game. The initial tests were successful and provided validation to continue.

OneCourt's big challenge is creating relationships with teams and leagues to get access to data required to make the device work.



It was a big challenge to evolve the technology to work in a real environment, with enough fidelity to represent a real game. The team worked on building bespoke hardware that was suited for the task and worked to get access to real-time data. This reduced the latency of the device so it could essentially work in real time.

During this period, Mace got support from Microsoft's AI for Accessibility Program and the National Science Foundation. Additionally, OneCourt applied to and was one of five winners of the Consumer Electronics Show 2024 Eureka Park Accessibility Contest. This provided funding for Mace to travel to Las Vegas for CES and demonstrate a version of the device that was working for a football game. He even had Stevie Wonder stop by the booth to try it.

IP-related challenges

OneCourt is beginning its IP journey.

Mace has a provisional patent application and is working toward converting it to a full utility after the year expires. He feels that having a solid IP portfolio will put his business in the best position to discourage infringement and will help foster opportunities to license the technology for other applications outside of his core use case.

The product is in pilot phase, with manufacturing likely to start toward the end of the year. Just a handful of units exist; most of the assembly for those was done in-house. Mace will likely look to overseas vendors to help with the build after the design is fully solidified.

A big challenge is creating relationships with teams and leagues to get access to data required to make the device work. There is a massive amount of information streamed live at professional sports games, but it is not readily available without licensing it.



"A lot of our work has been how you partner with the right stakeholders who can make the decision and open that door," Mace said. "They've been very receptive to this concept ... and they understand that their sport is presently inaccessible. They want to improve their product, and they want to reach new audiences."

He is excited to do a pilot run with the NBA's Portland Trailblazers. The devices will be used at the last three games of the regular season this year, providing an opportunity to get feedback from users and generate additional interest.

"We call ourselves sort of a tactile broadcast. We're hoping to be the world's first tactile broadcaster."

A broader vision

Although the focus has been to create devices that will be available and used at stadiums, Mace wants to keep the door open to make OneCourt available as a general consumer product. He is working to keep the cost of goods low enough so that all visually impaired people can have access to it.

Mace is also keeping his eyes open for other markets and opportunities that could benefit from the technology, including exploring its use for people with autism.

No matter the user, he wants to make an impact through a better game experience.

"We are so excited and encouraged by the impact that this tech has already had," he said. "I mean, people love it. It's awesome to see that people are adopting this and using it." 🏀

Details: onecourt.io

OneCourt ingests real-time data from an event and turns it into vibrations that allow the user to feel what is going on and where the ball is.

Helping Hands

ARTHRITIS SUFFERER'S PRODUCT LINE DESIGNED TO HELP PEOPLE WITH HAND AND WRIST CHALLENGES **BY EDITH G. TOLCHIN**

IN THE January 2023 *Inventors Digest*, I wrote about EazyHold—a line of assistive devices to help seniors, people with disabilities, and more. Here is a new product line created by UK-born Sarah Dillingham, who lives in the state of Washington, to assist people with hand and wrist challenges. It's called Grace & Able.

Edith G. Tolchin (EGT): Please tell us a bit about yourself and your background.

Sarah Dillingham (SD): I have rheumatoid arthritis and was diagnosed at age 28. I'm originally from London, where I worked on projects for large corporate companies. I married an American, and we moved to Washington about five years ago.

all-day comfort, with features like easy on/off zippers, soft breathable fabrics, and a streamlined shape. Color and sizing are important to our customers, which is why we go up to five sizes and eight colors.

We currently have two therapeutic products on the market: wrist braces for support and stability, and compression gloves for relief from arthritis.

EGT: How long have you been working on the inventing process and product development?

SD: Ten years! It started when I had to wear an orthopedic brace to do my first dance at my wedding due to arthritis damage in my wrist.

The brace was ugly and bulky, so I redesigned it to match my dress.

I shared the images online and discovered many other women looking for more attractive and comfortable joint support alternatives.

I knew there was a business here because of the high level of customer dissatisfaction with competitor products, but didn't know how to make it happen. Manufacturing a physical medical device seemed very daunting.

I was interested in the potential of 3D printing for orthopedic splinting. I developed an ergonomic, lightweight wrist splint with the help of Innovate UK, a government agency that supports British inventors.

Then, life intervened. I was in an accident. I sustained a serious head injury and had to put the project on hold. But even during my recovery, I couldn't stop thinking about the idea.

EGT: Please fully describe your product line.

SD: Grace & Able empowers women with arthritis by offering better joint support. Our products are hand therapist designed to meet the needs of the 50 million American women living with chronic joint pain.

Grace & Able's joint support reduces pain and swelling through gentle compression and lightweight splinting. Our products are designed for

Sarah Dillingham, who has rheumatoid arthritis, founded Grace & Able. The product line includes the Breathe wrist brace.



"I knew there was a business here because of the high level of customer dissatisfaction with competitor products." —SARAH DILLINGHAM

When I moved to the USA, I advertised for hand therapists to help with the medical side of product development and met Trevor Petrie, a certified hand therapist. We immediately clicked, with aligned visions for joint support products that meet biomechanical, neuromuscular and psychosocial patient needs—in short, braces that are medically effective, comfortable and attractive.

We incorporated Grace & Able in 2021 to bring our new and improved compression gloves and wrist braces to market in 2022.

We are a bootstrapped company, completely self-funded except for a small grant from helloalice.com.

EGT: Where are you selling? (I did see other possible knockoffs of your products on Amazon. How do you handle this?)

SD: We primarily sell via our website. We are also on Etsy and Walmart.com, and have some new sales channels opening shortly.

Our IP protections include our trademark and three patents (one utility, two design). It is unlikely that these protections will stop knockoffs.

Our strategy is to keep building our reputation as a trusted brand. We do that by connecting closely with our customers so that we can keep delivering great products for them and provide them with a high level of customer service.

EGT: Have you invented anything else? Have you had any obstacles?

SD: Yes and no. I have had many invention ideas, but the wrist brace is the first one I've patented and brought to market.

In fact, I have too many invention ideas, which can be quite distracting. I keep a spreadsheet of all the inventions that I'd like to develop so they don't keep buzzing around my brain. The ideas range from fishkeeping equipment to a device to help people with ADHD focus during meetings.

The biggest obstacle with Grace & Able was my lack of knowledge and experience around manufacturing and running an e-commerce business. It's a steep learning curve. I have invested time in improving my knowledge and

skills through programs like the Washington Innovation Network, M2D2 IMPACT Cycle 5, the Fellowship of Female Founders, and Venture Labs.

There are so many incredible programs that can help aspiring entrepreneurs fill in the gaps in their skills through formal learning and mentorship.

Also, a big shout-out to The Women Inventors Club—product-based entrepreneurs, run by Marcy McKenna, which is full of female inventors supporting one another.

EGT: Where are you manufacturing?

SD: For our wrist braces, the splints are manufactured in the USA, and the soft goods element is made in Guatemala. We are very impressed with the Guatemala factory in terms of quality, communication and how they treat their staff.

Our compression gloves are manufactured in China. We have a great relationship with our factory, which is third-party inspected. We talked with around 10 factories in the USA and overseas until we settled on this one.

EGT: Are you working with an independent testing laboratory for quality control testing?

SD: Our products are third-party lab tested to meet regulatory requirements for Azo dyes, colorfastness and laundering. We are FDA registered for Class 1 medical devices, so we meet their requirements, too, including complaint handling.

EGT: Does this type of product require product liability insurance?

SD: Yes, we have product liability insurance.

EGT: Have you received any patents? Has that process been difficult?

SD: We have one utility patent and two design patents on our wrist braces. We hired a patent



Color and sizing are important to customers, as with Grace & Able's compression gloves.

attorney because the patent filing process is so technical.

My big tip is to hire an experienced patent artist to do the drawings. If there are any inconsistencies, the USPTO will send them back.

EGT: What advice do you have for those who might be interested in developing similar assistive devices, or suggestions on the invention process in general?

SD: 1) Validation is everything. Do not throw yourself into developing a product until you have validated the customer demand, market size, competitor, and patent landscape. Your time and money are very precious. It's painful to let go of an idea you love, but it's much worse to spend a year and your savings on an idea that is doomed to fail.

2) You don't need to do it alone; join an inventor group or program. There are tons of wonderful people in the inventor and

entrepreneurial community who have been there and done it, with insightful lessons to share and who love to support up-and-coming inventors.

3) If your invention is a medical device, Boston and Seattle both have strong ecosystems around health.

EGT: Are you developing any new products?

SD: We have two exciting new products coming out soon. I can't tell you more than that, even though I'd love to shout about them. 🤖

Details: [graceandable.com](https://www.graceandable.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/fAGlvZJ>) and "Secrets of Successful Inventing" (<https://a.co/d/8dafJd6>).





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SUPERX FOUNDER AUSTIN GAYNE EVOLVES AND THRIVES THROUGH PERSONAL AND PROFESSIONAL CHALLENGES

BY REID CREAGER

AUSTIN GAYNE would have you believe he's not an expert on many things. But consider this.

The 29-year-old millionaire founder and CEO of SUPERX—which merges activewear and pop culture, the first company in the world to do this with officially licensed collections—waxes astutely about inventing and entrepreneurship as a science project. He has no medical background but vast experience in building scar tissue. Has never picked up a sculptor's chisel yet can tell you all about the process.

Gayne's father left him before he was born, and he was overlooked and bullied in school. He overcame it to build a lucrative sales career in his early 20s, earning a six-figure salary but squandering it on youthful indiscretions. Laid off and ended up living with his mother. Caught stealing \$1,000 of body building supplements at CVS. Got his own apartment, where he couldn't afford a shower curtain or a trash can. Teetered on the precipice of business irrelevance as recently as last year.

This all fits together, albeit not very neatly.

But Gayne appreciates not having a smooth path to success and why it happened this way. And he wants to help make things happen for you.

Overnight success? Yes and no

Amazon founder Jeff Bezos said, "All overnight successes take about 10 years." Gayne is pretty much on schedule.

Twelve years ago, he saw the movie "The Avengers" and was riveted by how fit the actors were; he saw the unmistakable connection between superhero actors and fitness that could be leveraged in the form of products.

He was 23 in 2018 when he founded SUPERX, during a time he was sleeping on his mother's couch in her mobile home. As he matured and profited intellectually from obstacles both self-imposed and not, he methodically cultivated an entrepreneurial savvy via trial and error and observation that grew momentum for his business. Yet as recently as last September, he was still financing SUPERX through credit cards and other creative debt means.

That's when a lucrative licensing deal with Hasbro that launched the world's first Power Rangers activewear tracksuit collection—the culmination of all he learned about business, perseverance and discipline at his personal School of Hard Knocks—opened doors faster than a speeding bullet. This led to the recent deal

The tattoo on Austin Gayne's chest is the Latin phrase "fortis Fortuna adiuvat," meaning "fortune favors the bold." His personal and entrepreneurial story embody this, as do these articles in his SUPERX line (clockwise, from left): the Wolverine Performance Tee; the Men's Captain America Short-sleeve Tee; and Thor Graphic men's shorts. Bottom left: The ColorWay watch, from bold watch and jewelry brand S-FORCE.

PHOTOS COURTESY OF AUSTIN GAYNE



Below: The IronMan Short-sleeve Tee and Wolverine Zip-up Hoodie reflect some of the diversity of the apparel.

with corporate action icon Marvel, and a future that Gayne sees as unlimited.

The journey to that destination was anything but fast. SUPERX had several previous iterations, including as a supplement and as a workout program. But Gayne saw possibilities in superhero activewear that he felt had not been maximized, and pivoted to that product a few years ago.

"We analyzed the market, and I just realized there wasn't anything like this," he said. "And I didn't know how big this niche or this market would be, but luckily it ended up being far bigger than I had thought."

"It's funny; ever since I started the business, people would always be like, 'Oh, that doesn't really make sense.' Or 'That's kind of weird,' because it is different."

Gayne didn't take it personally. He agrees. "If you take a look at our website, you'll see that the outfits look different—I mean, compared to what else is out there."

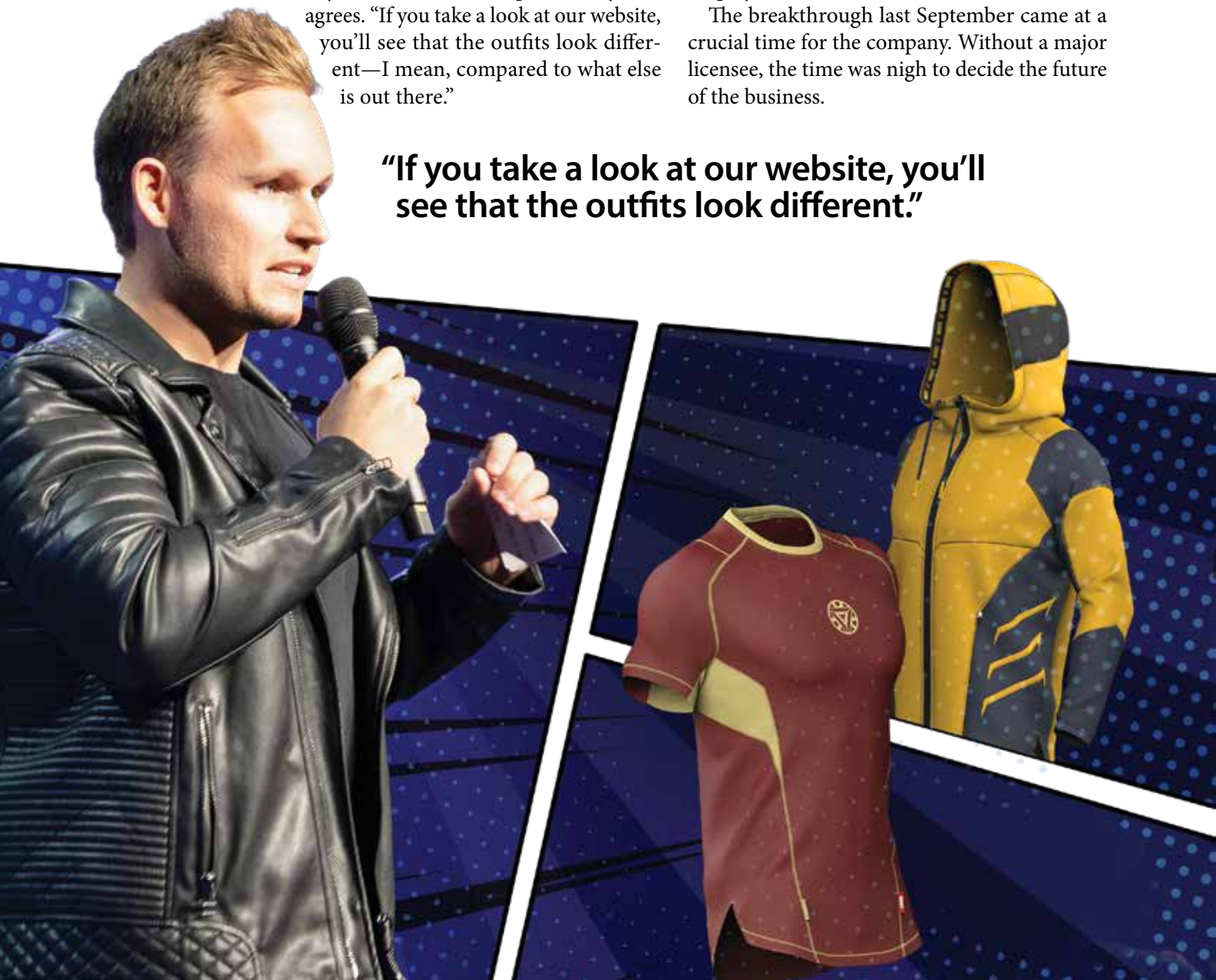
He aspired to more than what else is out there. "We're the only company that makes an extremely high-quality product that can be adapted to multiple situations. So, we find our customers aren't kind of buckled into this one specific area or interest like most brands do."

"Lots of people like the characters we're licensing, so it's not really that. That's easy for us to kind of get an initial interest."

"The reason I think we're going to grow very large compared to now and why we're going to continue to get big is our products offering multifaceted use for the consumer—whether you want to go to the gym in our gear, whether you want to train in martial arts, whether you want to walk around the city, go for a run, run a marathon, or even wear to Comic-Con as a cosplay outfit."

The breakthrough last September came at a crucial time for the company. Without a major licensee, the time was nigh to decide the future of the business.

"If you take a look at our website, you'll see that the outfits look different."



The product wasn't the problem. "We were making our own apparel. We were doing cool colors. We were using a process called cut and sew, now screenprint, so it was very different from what else was out there.

"But we got to the point where we had to decide if this is going to grow to the level we would like it to grow. We needed to partner with the largest brands in the world.

"We were barely getting by. We were heavily, heavily reliant on loans and lines of credit. We were at a survival standpoint, going from month to month. As someone who's running a business like that for years, it takes a toll on you mentally and emotionally."

How to license with superpowers

Given that licensing was everything in terms of SUPERX's future and that he had no help via venture capital or other contacts and resources, Gayne constantly fed his hunger with information. He examined other deals, sought input, paid to meet with officials at other companies.

He gained an intricate understanding through this research. In a nutshell, the biggest takeaway was learning what billion-dollar potential licensees expect—and demand.

He spent a significant portion of this interview explaining this in a way that he hopes will help other inventors and entrepreneurs.

"So, let's take our most recent licensee, Marvel—which is Disney, essentially. They're trying to do a couple things.

"One is, they're trying to protect and preserve the value of their brand, meaning they don't want to work with brands that will devalue their image. Number two, they want to work with the company that would not pose a financial risk to them—somebody who's not a startup on Day 1 with no venture capital."

So, it is highly unlikely, if not impossible, to swing a deal with a billion-dollar empire based on just an idea, no matter how attractive it seems. The way to check that off the list, Gayne said, is to grow your business.

"Get some traction. Get some momentum. Then, you're not in a risky position. Show your business is growing. You're not going to default on your payments. You have a good financial setup. You know what you're doing.



AUSTIN GAYNE

HOME: Nashville

BORN: Norco, California

PERSONAL: Wife Marissa

EDUCATION: High school, Harvard Online Business School

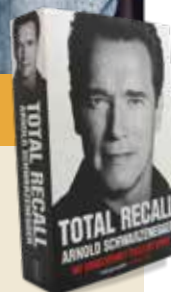
HOBBIES: Martial arts, weightlifting

FAVORITE BOOK: "Total Recall," Arnold Schwarzenegger

FAVORITE MOVIE: "The Dark Knight"

FAVORITE SONG: "Carry on Wayward Son," Kansas

PERSON I WOULD MOST LIKE TO MEET: Elon Musk





“We were barely getting by. We were heavily, heavily reliant on loans and lines of credit.”

Last September, SUPERX landed a lucrative licensing deal with Hasbro for the world's first Power Rangers activewear track-suit collection.

“Then you’re someone they can trust, someone who understands their numbers, somebody who has put the time in to understand business holistically.”

It’s also important to ensure the prospective licensee is not oversaturated in your category (the business term for this is the red ocean). “A company is not going to have 100 licenses in backpacks, right? That would cannibalize all their other licensed products. They basically set some strict criteria in each category in order not to cannibalize their own sales.”

The last talking point is the bottom line—how much profit or royalties will your company bring to them.

“Our business model is dedicated towards licensing, so that puts us in a unique spot. So, when they ask us if we can reach certain targets, we can answer with full transparency.”

When SUPERX launched the Hasbro deal with its Power Rangers line, “We did more revenue in that 30-day period than we had done the entire year prior, so that told us this is the right product.

“Hasbro executives were so impressed, they requested samples and more information. That’s how a company not on anybody’s radar was able to basically create royalties for a major, major company in a short amount of time.”

Deals with GI Joe and Transformers followed, which led to the interview and deal with Marvel.

“If we hadn’t taken that first step with Hasbro, proving that we could be successful with licensing to the point where Hasbro was impressed, Marvel would have never taken a look at us. In fact, I had approached Marvel several times. I never heard anything back.

“So you need a product-market fit with measurable success—meaning numbers, revenue and sales. If that goes well, never give up in terms of approaching the brands or the companies you want to license with.”

Living his science projects

It’s fitting that Thomas Edison—part scientist, part inventor—has a famous quote that Gayne cites as one of his greatest inspirations for perseverance: “I have not failed 10,000 times. I’ve successfully found 10,000 ways that will not work.”

This is the foundation of Gayne’s likening inventing and entrepreneurship to a science project. It’s also a metaphor for his personal life.

“I love comparing business to the scientific process, where you have what’s called the hypothesis, and then you have to test that hypothesis. Then, you have to basically report on your findings.

“If they were correct—well, fantastic. Your experiment is done. But if not correct, you basically have to change your hypothesis and redo the process over and over until you’ve been proven correct.”

This can be daunting for anyone—inventor/entrepreneur or not. “That’s why I don’t recommend business for everybody. Because you have to have a high stress tolerance in order to get a business off the ground.”

In a positive vein, he says disappointments and trials can build “a good amount of scar tissue, as I like to say. You develop this through these hard times that will allow you to basically take a business very far because of the experience you have and what you went through.”

Gayne has ample figurative scar tissue to prove it. He stops short of claiming his rugged trajectory to success was the only way for him to get there but understands the value of it in shaping himself personally and professionally.

“It’s not a pity story. It’s just that growing up, I always kind of felt like the black sheep or the



MISSING HIS WINGS

The inspiration for this month’s cover photo will forever remain an inspiration to Austin Gayne.

His Instagram account includes a photo of champion bodybuilder Greg Plitt, prone on his chest with arms stretched across a railroad track, with Gayne emulating the pose above it.

Because Gayne never knew his father, Plitt became his first role model not long after they met at a gym in Glendale, California, in 2013. A month earlier, Gayne had been caught stealing supplements from a nutrition store.

He said Plitt was “the first person who showed me how, with hard work, persistence and an unshakeable character, you can rise above your present circumstances and earn the life you want, becoming a man you’re proud of when you look in the mirror.

“He was the person who helped create the turning point in my life and I am forever grateful.”

It’s still difficult for Gayne to talk about his friend, who died in 2015 when a train hit him as he was filming a video. He has tentative plans to launch an activewear collection in his memory in January—the 10th anniversary of his death—in partnership with his family. Profits would go to Plitt’s charity.

“Every time I go through a hardship, I read the first email he ever sent me and remind myself that he saw potential in this broken kid,” Gayne wrote on his Instagram post.



Gayne bought half ownership of watch and jewelry brand S-FORCE in 2022.

odd person out. So, you develop a major sense of wanting to prove people wrong, basically growing up with a massive chip on my shoulder.”

Like so many other high-schoolers, he hoped a great physique would help him find acceptance. He tried to take a shortcut and stole supplements at a store, returned to his car, and saw a manager taking down his license plate number. He went back inside, apologized, and was not charged.

The chip on his shoulder was growing heavier. He considers it a blessing he was able to translate that into ambition.

“But there is healthy ambition and unhealthy ambition,” which he learned when he found himself making a six-figure income after coming from nothing.

“It basically fueled me financially for the unhealthy version of myself. So, someone who’s immature and insecure, making more money than their peers and their friends and their parents, I started buying stupid things.”

Fate and his place of business abruptly stopped that when he was laid off and had to move in with his mother. When he eventually

moved into a cheap apartment, “I didn’t even have a shower curtain. I didn’t have anything. I didn’t have a trash can, so I would tie a trash bag to the handle of the pantry.”

Meeting his future wife, Marissa, in 2017 helped him channel his ambition in more productive ways.

“She has the maturity, appreciation and nurturing aspects that really help me. Over time, I’ve been able to completely shift out of those initial feelings and become the man I am today.”

Gayne said it is life-changing to have a partner “who can hopefully help chisel you the same way a sculptor does.

“It’s kind of like getting chiseled over and over and over. And who I am today is not the man I’m going to be in 10 years or 20 years or 30 years.”

A different kind of force

His aggressive entrepreneurship remains unchanged.

In 2022, despite the financial challenges and uncertainty of not having a licensee for SUPERX, Gayne bought half ownership of watch and jewelry brand S-FORCE—which he modestly said “I’m just kind of running right now.” Its main demographic is athletic men 25-50.

“I’m not gonna lie and say it’s not difficult,” he said of the responsibility of owning two businesses. “But outside of being married, going to church and working out, I don’t really know anything else. So, running two businesses hasn’t been much of an issue for me.

“Thank God I didn’t have to come up with the product market fit or come up with the idea. It was already established.”

Prominent athletes associated with S-FORCE include Ultimate Fighting Championship stars Kamaru Usman and Tony Ferguson, former NFL star Terrell Owens and bodybuilder Lee Priest.

The bold nature of the pieces is a good fit for a man who is an expert on more than he says. ♦

Details: superxapparel.com, s-force.com

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Creating Careful Chaos

INNOVATION ISN'T INVENTION; IT'S OFTEN A NECESSARY, WELCOME CHANGE IN THE WAY WE DO THINGS **BY WILLIAM SEIDEL**

INNOVATION breaks rules, changes established norms and calls for new thinking—creating chaos in the process. It is progress by disruption and essential to business growth but dismissed by many.

An innovation can demolish established systems. Digital, downloadable music revolutionized the music industry. It changed the products, manufacturing and even music distribution. It made tapes, CDs and record stores obsolete. Apple captured a commanding position in the music industry with the iPod, iTunes and iPhone.

Social media and mobile communication transformed the way people interact, communicate and form relationships. We are just beginning to recognize the changes from artificial intelligence.

or opening a gift store in town may be enterprising, but it is not innovative.

Many companies claim they want innovative products but turn them down. Why? Because they are not interested in products; they are interested in profits.

New products are unproven, the risks and costs high and consumer acceptance unknown. Instead, most companies improve existing brands and tap existing customers.

Conforming to established manufacturing, marketing and distribution systems means faster to market and lower cost. For this reason, nine of 10 corporate product introductions are line extensions.

With a known brand, risks are low with minimum development and customers are willing to try an improvement to a brand they know.

A new product or even a revolutionary product is not necessarily an innovation. An improved drill with speed control can make better holes faster but does not change the way people use a drill.

A battery-powered drill changes the way we power and use the drill. They both drill holes, but battery-powered drills changed the cost of drills and the user's behavior.

The strategy must balance the chaos of innovation with the stability of conformity. This is the most efficient, cost-effective path to successfully launch an innovative product.

What innovation is, isn't

Many may believe innovation is a fancy word for invention.

Innovation does not mean invention. Innovation is a change in the way we do the things we do and has social impact.

According to management consultant, educator and author Peter Drucker, innovation is a change in lifestyle. It is an effect in economy and society that causes a change in the behavior of individuals.

The word innovation has connotations of advanced thinking. It has become a buzzword for being on the edge of progress.

Unfortunately, many companies use the word to convey monumental change when it is just a small improvement. Launching a new product

Entrepreneurs are the innovators

Innovation is not necessarily a success. Wikipedia was disruptive and threw chaos on the encyclopedia business, making it all but obsolete. It wiped out a billion-dollar industry and thousands of jobs, and now depends on donations.

Entrepreneurs are usually the innovators. If they brought change to the customer, they are the innovators.

Ralph Baer is the inventor of the video game. But Nolan Bushnell is the innovator because he founded Atari and commercialized the video game, creating an economic and behavioral change.

Richard and Maurice McDonald created the Speedee Service System for reproducing

the same hamburger every time. In 1954, Ray Kroc became the franchising agent and the entrepreneur who was the innovator. Kroc disrupted the restaurant industry by innovating the fast-food concept and changing what and where we eat.

Entrepreneurs consider risk a cost of innovation. Bankers, accountants, attorneys and often CEOs are generally risk adverse.

Marketing an innovation is a herculean task. Expensive education and marketing are needed because no one knows what it is, what to do with it, or why they need it. This makes it nearly impossible to value, and hard to fund.

Innovation needs new strategies to compete with bigger budgets, better protections and established distribution. Most companies avoid the high cost in favor of evolutionary products.

Conquering fear of change

Resistance to change is a deterrent to innovation. When change occurs, some hide, some react out of fear, and some learn to live with it.

British politician Tony Benn said of progress, “It’s the same each time. ... First, they ignore you, then they say you’re mad, then dangerous, then there’s a pause, and then you can’t find anyone who disagrees with you.”

Resistance to change is perfectly normal. However, innovation often requires learning a new process and readjustments.

Consumers prefer no change or an easy-to-understand improvement. Any change has the potential to disrupt psychological equilibrium and increase resistance. When the resistance is too high, the innovation fails.

Chester Carlson, the inventor of xerography, tried for nine years to raise money from RCA, Remington Rand, General Electric, Kodak, IBM and others. They all turned him down, asking: Why would anyone need a copy machine when we have carbon paper?



Horace Rackham, president of Michigan Savings Bank, recommended that Henry Ford’s lawyer not invest in the Ford Motor Co.: “The horse is here to stay, but the automobile is only a novelty—a fad.”

Many people cannot imagine what does not exist. They don’t have the vision to see what is not, or to imagine what could be. So, they deny it and trust what they know.

Resource constraints limit time, money, people, equipment and materials, and affect success. Startups and smaller businesses struggle to adequately manage their resources.

Managing innovation is challenging because there are many unknowns and surprises in the process.

It requires careful planning, adapting to changing conditions and being prepared to learn from failure. And time is working against you to quickly generate revenue.

Build the windmills!

Innovation challenges the status quo, introduces chaos and forces adaptation. Conformity provides established systems, manages costs and ensures stability for sustained growth.

The strategy must balance the chaos of innovation with the stability of conformity. This is the most efficient, cost-effective path to successfully launch an innovative product. And the right strategy makes it a smooth transition.

Resistance to change remains the biggest obstacle to innovation. A Chinese proverb has a great philosophy:

“When the winds of change blow, some people build walls and others build windmills.” ☞

William Seidel is an author, educator, entrepreneur, innovator, and a court-approved 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.



Mistakes in Building Relationships

WHEN WORKING WITH COMPANIES AND OTHER INVENTORS, AVOID THESE COMMON ERRORS **BY APRIL MITCHELL**

I HAVE SEEN many mistakes when people try to contact and work with companies, as well as with other inventors. I've even made some myself.

These can be the difference in whether your invention is a success or not. Here are the top three errors I see in each situation.

With companies

Sending unsolicited marketing materials. You should only send marketing materials to companies after getting permission. Yes, it's OK to ask what their process is and/or who is the best contact for presenting products to—but don't just send things over.

Once you have permission and send your materials, follow up with them about your product. You may even be able to set up a pitch meeting with the company—something I always prefer, because it gives me a chance to meet people at the company and start to build the relationship.

Arguing about why your product is a good fit. Companies presumably know their customers best and what is currently happening with the company. It may be a fit, but not now or for whatever reason.

Arguing with them will most likely not convince them—and can close a door for you.

It's important to graciously accept the feedback from a company. If it does not give you feedback with the rejection, you have the right to professionally ask what made it not a fit and how you might get closer to a fit the next time.

Not knowing your pitch audience. Do your research and know your audience! You should know about the company and why your product could be a good fit for it. You should know where and how it fits within its product line.

Think about the categories the company manufactures in, as well as factors like the material and price. If it comes back to you with questions, be sure you can answer about your product and how it works well with the company.

It's also important to familiarize yourself with the company's startup story, where it is based, and its top-selling products. The more you know about their company, the better!

I made all three of these mistakes when I started. I had to learn the hard way. But we must learn and improve if we want people to take us seriously as professionals and keep the door open to us.

With other inventors

Connecting with and supporting other inventors is a great way to be a part of the inventing community. It feels great to belong to a group of like-minded people and share tips, stories and advice, as well as provide encouragement.



We all have much to learn from each other, as well as things to teach each other. But sometimes, in our excitement about our product or even desperation to get it into the world, we may ask too much of other inventors.

Though most inventors like to help each other when possible, here are the top three things they don't appreciate.

Sending unsolicited marketing materials. Yes, it's the same mistake listed above when dealing with companies—but in this case for another reason.

Often times, new inventors want to get the opinion of a seasoned inventor and/or want to see if the other inventor wants to help them with it or pitch it for them. But many inventors like myself don't want to receive marketing materials from other inventors for a couple reasons.

One is that they could be working on something similar themselves and don't want to have a conflict of interest. The other is that they do not represent other inventors; they are inventors themselves and are working on getting their products licensed.

Requesting a list of companies for pitching. Inventors work hard doing research and making their list of potential licensees, as well as building upon those relationships. It takes time and effort to locate companies within an industry that can be a good fit to pitch your product to for licensing.

Hours spent online and in stores doing research should not be taken lightly, nor be expected to be handed over to others.

You as an inventor know your product best. By doing the research yourself, you should find the companies that are the best fit for your product. Go to trade show sites and events—a great place to start.

Also, pay attention to what companies other inventors are signing deals with, and add them to your list to research. And of course, do your online and in-person shopping research to see what companies are selling products in your invention category, and continually expand your list.

Asking for names and emails of contacts at companies. People and their contact information

Don't send unsolicited marketing materials—whether dealing with companies or other inventors.

are more than just “contacts.” They are relationships that have been built throughout time—sometimes, even years—and should be respected as such.

Asking for help getting to the right person from someone you may be friends with can be considered acceptable by some. But if you contact another inventor you have never spoken to before and ask him or her for contact information for someone, it may not come across well.

If a person from a company wants his or her contact information to be shared, usually inventors are happy to do so. But often, they would want to ask for permission and be ready to vouch for the inventor to whom they are giving the information.

Some things to think about before asking:

- Do I know this person well that I am contacting for help?
- Would he or she be comfortable vouching for me?
- How do I feel about sharing contact information?

It would be wonderful to be handed a list of companies and the people's contact information for pitching. I would have loved an easy fix when getting started as well.

But let's support other inventors in their wins and ask questions or for help when appropriate.

Join inventor communities to learn from each other and share information. Most inventors are happy to point other inventors in the right direction whenever possible. 📬



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*.



Satellite IoT 101

IMPORTANT BASICS ABOUT THIS HIGH-CONNECTIVITY TECHNOLOGY, AND PROTOTYPING WITH IT **BY JEREMY LOSAW**

THE **ACHILLES'** heel of IoT is that it only works in places that have infrastructure to move data to the cloud. WiFi and ethernet work great inside of buildings, and cellular and LoRa help in remote areas, but all are at the mercy of how much coverage is available.

The advent of satellite IoT is pushing the boundaries, offering unparalleled connectivity to even the most remote corners of the world. This technology is not just a tool for advanced industry pros but also the average inventor.

Here's some detail on satellite IoT, its applications, and how you can prototype with it.

A sci-fi kind of history

The concept of using satellites for communication is not new.

Science fiction writer Arthur C. Clarke is credited with the original concept of using satellites for global communication—first postulated in papers he circulated in 1945—and the space race of the 1950s and 1960s resulted in the placement of many communication satellites into orbit. The 1964 Olympic Games were televised through satellite link, giving the general public access to the benefits of satellite data transmission for the first time.

Using satellites specifically for IoT is a much more recent development. In contrast, cellular technology had a lot of development put into it. With the cellular coverage map filling out in modernized places, it became a viable solution for many IoT applications.

Satellite IoT, on the other hand, lagged. However, there are plenty of off-grid challenges where satellite is the only realistic way to move data into and out of remote or hostile areas, pushing satellite IoT forward.

Coupled with the decrease in cost of placing satellites into low Earth orbit (LEO), satellite IoT started becoming widely viable in the 2010s. Now, companies such as Iridium have

a network of 66 LEO satellites to support their IoT network, and there are many other competitors available. Important for the inventor, many different development kits are available to test applications easily—and at reasonable cost.

Satellite IoT has its challenges, many of them overcome and some still needing work. One is a lack of standardization of technology.

Terrestrial networks and protocols are largely standardized, which makes interoperability between devices very easy. But this is an area that is evolving in satellite.

Satellite has also had a bad reputation communicating with terrestrial networks, and it has been historically difficult for satellites to talk to devices running other protocols. This has also largely been solved.

Cost has been an issue, especially in the realms of satellite data and the hardware to communicate. However, access to the networks and hardware is increasing and driving down the costs, making it more available to a wider field of applications.

Applications opportunities

Many IoT applications are inside the range of standard terrestrial networks, but plenty are not. It does not take long, even in modernized countries, to travel to areas that are out of cellular range—and of course, off-shore locations inherently are not serviced by terrestrial connectivity.

On land, agricultural applications are a big growth area for satellite IoT. Farms large and small tend to be in rural areas where cellular or wired connectivity is scarce, making them prime areas for innovation. Similarly, oil and gas fields tend to be in remote areas away from population centers. Satellite IoT can also be valuable for environmental monitoring applications in unpopulated areas, and can be helpful for asset tracking when property moves away from connectivity zones.

Maritime applications are also prime for



There are plenty of off-grid challenges where satellite is the only realistic way to move data into and out of remote or hostile areas.

satellite IoT solutions. There are no cell towers offshore in our oceans or even large lakes. Cargo management, or monitoring of environmental or tech assets offshore, are a welcoming playground for satellites.

How to prototype

Because we are living in a golden age of satellite IoT adoption, it is much easier to develop these types of devices than ever before.

Iridium has a number of options for development hardware to test it in your application. It has off-the-shelf asset trackers, such as its Edge and Edge Pro solutions that are easy to get going.

For more adventurous developers, Iridium modems are available from open-source suppliers like SparkFun and Adafruit. But they require a data plan and some development work to get up and running.

IoT company Particle is jumping into the fray, starting to offer low-cost and accessible entry into satellite. Its new development board, the Muon, offers multi-radio connectivity, including

satellite. The Muon has the same form factor as a Raspberry Pi and connects seamlessly with the Particle IoT cloud, with inexpensive data plan options.

The Particle Muon development board is helping to make satellite more accessible to the masses.

No matter which platform you choose, note that satellite IoT is meant for low-data bandwidth applications. Data rates will either have a ceiling or be very expensive to push frequently. Applications where data is required on the scale of hours or days is better suited to this technology.

Sky-high future

Satellite IoT has gone from the realm of niche industry applications to being available widely for inventors and hobbyists. As more satellites are deployed, the cost of deployment and data throughput should improve—and there are already significant improvements in data and hardware costs.

Savvy inventors and innovators will be sure to add this technology to their prototyping palette. ☎

Above, left to right:
The Iridium Edge and Edge Pro and Particle Muon satellite board are among the most attractive recent prototyping options.



Goodwill Attempt Backfires

AMAZON PROGRAM TO THWART INFRINGERS IS COMPLICATED BY FEDERAL CIRCUIT RULING **BY LOUIS CARBONNEAU**

AS THE saying goes, no good deed goes unpunished.

Under pressure to fight counterfeit products on its online platform and those accused of violating third-party patents, Amazon created its APEX program. It's sort of an intramural arbitration process whereby someone claiming its patents were being infringed upon by an article sold on the Amazon website could—for a \$4,000 fee—file a complaint and be bound by the final decision of the patent specialist retained by Amazon.

Once again, we are left trying to fix a mess the courts created where none existed before.

Although the cost is extremely reasonable compared to the alternative, there is no appeal if you don't like the decision. But the process has the merit of providing an off-ramp to small inventors who do not have the resources to take serial infringers to court.

Lately, though, one unintended consequence of this private remedy showed its ugly head. The

United States Court of Appeals for the Federal Circuit ruled that using Amazon's APEX patent enforcement process to target an alleged infringer's listings can subject the patent owner to personal jurisdiction in the accused infringer's home state, as it purposefully directs enforcement activities affecting the seller there.

This indirectly provides a way for an alleged infringer to bring a preemptive challenge to the patents before the courts, and on its own turf!

This is exactly what the APEX program was trying to avoid.

The logical next move, in my opinion, would be for Amazon to require those selling on its platform to agree to subject themselves to the exclusive jurisdiction of the APEX program so they can't have standing to sue in court.

Once again, we are left trying to fix a mess the courts created where none existed before. ☹

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.



IPR Losers Don't Have to Pay

SINCE THE U.S. Supreme Court decision a few years ago in the Octane Fitness case, the prevailing party in a patent case can ask the court to force the losing party to pay the entirety of its legal fees, which can often amount to millions of dollars after a full trial. The court will grant such a request only in “exceptional cases,” which the courts have interpreted many ways.

Needless to say, this has had a chilling effect on some small plaintiffs who can only sue with a contingency arrangement and who do not have the resources to face any payment to the other side should they lose a case.

As a result, defendants in patent cases have systematically used this tactic aggressively to deter more lawsuits—with a certain degree of success. One defendant recently tried to extend the rationale in the Octane case to *inter partes* reviews (IPRs) before the Patent Trial and Appeal Board in the case of *Dragon IP vs. Dish Network*.

The irony is that such a request came from Dish itself, the party challenging the validity of a given patent—which, it is worth reminding, benefits from a legal presumption of validity. After it succeeded (no big feat, because the PTAB invalidates more than 75 percent

of patents it reviews), Dish asked the court to award its legal fees on the basis arguably that the patent should never have been issued in the first place or its validity defended by its owner.

Fortunately, this rather twisted view of loser/payer did not sway the U.S. Court of Appeals for the Federal Circuit, which ruled that such a doctrine did not apply to IPRs.



UPC STRICT ON BONDS IN DISPUTES

Recently, the Unitary Patent Court issued two interesting decisions, both having to do with the payment of a bond after issuance of a preliminary injunction to guarantee payment to the other party should it succeed in lifting such an injunction later.

First, UPC's Paris local division ordered U.S.-based plaintiff ICPillar to provide security for potential reimbursement of litigation costs to the defendant Arm. The Paris court found ICPillar's assets were unclear.

The Paris court rejected ICPillar's proposal to use a U.S. insurance policy or bank guarantee, requiring

instead a guarantee from an EU bank.

This highlights that although the UPC aims to avoid discrimination against foreign parties, there are procedural requirements that can make it more challenging for U.S. entities to enforce patents at the UPC compared to EU-based plaintiffs.

In the other case, the UPC's Munich local division denied requests by Volkswagen, Audi and Texas Instruments to require U.S.-based plaintiff Network System Technologies to post security for potential reimbursement of litigation costs. The court said defendants



must show a clear bankruptcy risk to justify such orders, not just argue the plaintiff is small and foreign.

Network's valuable patent portfolio acquired from Philips gave comfort on recovering costs. If upheld on appeal, this pro-access to justice stance favors smaller entities and litigation funders enforcing patents at the UPC against larger companies.



Patent, Trademark **Backlog**

USPTO DIRECTOR CITES 'UNPREDICTABLE MACRO EFFECTS' AND PANDEMIC CREATING A SURGE OF APPLICATIONS

BY EILEEN MCDERMOTT

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

U.S. PATENT and Trademark Office Director Kathi Vidal published a director's blog post July 11 addressing the office's current backlog of patent and trademark applications, which the latest USPTO data show to be 785,387 unexamined applications/25.6 months total pendency for patents and 14.5 months total pendency for trademarks.

Vidal said in her blog post that "unpredictable macro effects, including a pandemic that had an outsized impact on our application inventories, have created an 'inherited backlog' of both patent and trademark applications."

She added that the predicted slowdown in patent filings for 2020 and 2021 turned out to be "more modest and short-lived than expected." This contributed to the backlog because hiring targets were reduced.

According to the office's recent Notice of Proposed Rulemaking on Setting and Adjusting Patent Fees, the present backlog is predicted to increase to 820,200 by fiscal year 2026 before decreasing to 780,000 by fiscal year 2029.

Sources have told IPWatchdog that the current 785,387 total backlog may be near or at an all-time high, though the USPTO could not immediately confirm that.

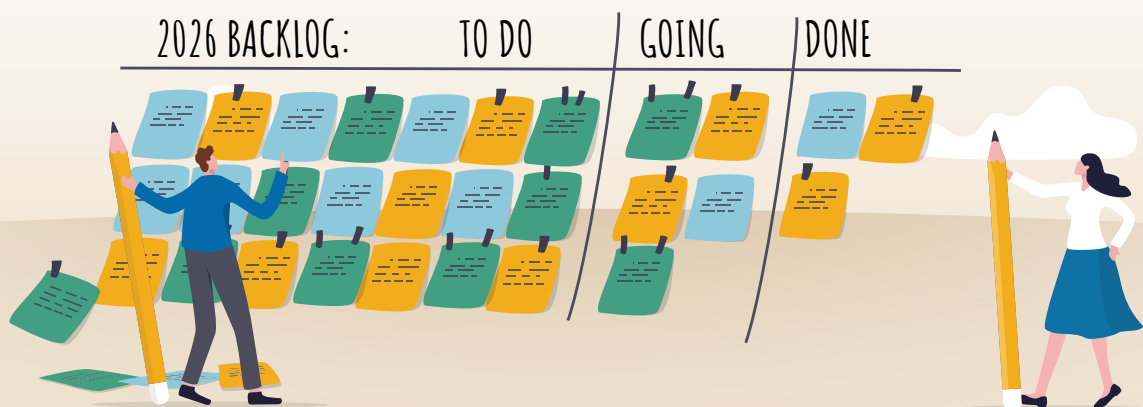
Total pendency for patents as of May 2024 was 25.6 months and 20 months for a first office action.

More patent examiner hires

Vidal wrote that, in response to examiner suggestions, the office began routing patent applications in 2022 "to increase the likelihood that a patent application would be assigned to an examiner with the right technical background in the first instance." She has also extended working hours, and recently secured an increase in the special rate table that applies to nearly 9,000 patent professionals.

"Moreover, we made adjustments in our award structures to better attract and reward employees who make meaningful contributions to our pendency and quality goals," Vidal wrote.

The backlog is predicted to increase to 820,200 by fiscal year 2026 before decreasing to 780,000 by fiscal year 2029.



The USPTO also hired 644 patent examiners in fiscal year 2023 and is on target to exceed its goal of hiring 850 examiners in fiscal year 2024, she said. This push will continue through fiscal year 2025.

Trademark filings 'unprecedented'

As for trademarks, Vidal said that during the pandemic "more people started their own companies, launched new products, increased cross-border e-commerce, and filed trademark applications to improve their brand protection." This led to "unprecedented" application levels for those years.

Additionally, some of the applications filed in 2020 and 2021 were fraudulent. The USPTO has addressed this by shifting its fraud-related work to the Register Protection Office in June 2023.

In fiscal year 2023, average annual first action pendency for trademarks was 8.5 months; as of the second quarter of 2024, first action pendency was at 8.2 months and total pendency 14.5 months.

But Vidal said in her post that "average annual first action pendency has decreased to 7.85 months and is dropping." She attributed this to IT improvements, shifting the "exceptional office action standard" from first action to final action, and new incentives for first action productivity for examiners.

Total trademarks inventory as of the second quarter this year was 1,354,718.

Suggestions welcome

Vidal outlined many other efforts the office is undertaking to address the backlogs, including recent and upcoming IT updates. She suggested stakeholders should send ideas for reducing pendency to her directly.

In 2007, due to concerns about the USPTO backlog of 730,000 unexamined patent applications at the time, the Government Accountability Office presented a report to Congress that found the office's hiring efforts were not sufficient to reduce the backlog. The backlog subsequently decreased over time, after various new approaches to hiring were implemented. 📧

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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Best wishes, Jack Lander



USPTO Updates AI Guidance

NEW PROVISIONS OPEN FOR COMMENT FOR 60 DAYS FROM PUBLICATION, EFFECTIVE JULY 17

BY EILEEN MCDERMOTT AND GENE QUINN

THE U.S. PATENT and Trademark Office has updated its Subject Matter Eligibility Guidance to more directly address emerging technologies, specifically artificial intelligence.

The guidance also includes three new and detailed examples using hypothetical claims to address common situations, such as “whether a claim recites an abstract idea or whether a claim integrates the abstract idea into a practical application.” (*Editor’s note:* We cannot include those examples here for space reasons. See uspto.gov/initiatives/artificial-intelligence/artificial-intelligence-resources.)

The last time the USPTO issued updated eligibility guidance was in 2019, under former USPTO Director Andrei Iancu, to help examiners more predictably apply the two-part *Alice/Mayo* test for subject matter eligibility.

Vidal told IPWatchdog CEO and founder Gene Quinn in an exclusive interview that the new guidance is not a departure from that but is meant to provide additive examples based on the office’s collective history since 2019.

“Overall, when it comes to policy at the intersection of AI and IP, we want people to use AI,” Vidal said. “We want people to innovate with and adopt AI, but we want to make sure we strike the right balance so that AI is used for innovation but isn’t used to lock up innovation.”

Vidal referred to the USPTO’s February guidance for determining

inventorship of AI-assisted inventions, to explain how failing to strike this balance could be detrimental:

“If we were to allow AI [to obtain] U.S. patents regardless of what role AI played in the inventorship process, someone could set AI loose to invent every chair. And then patent every chair. And then you’ve locked up innovation.

“We want to accelerate innovation but then also get it to market; we don’t to lock it up so people can’t get patents in a space.”

Human element emphasized

The February inventorship guidance clarified that “while AI-assisted inventions are not categorically unpatentable, the inventorship analysis should focus on human contributions, as patents function to incentivize and reward human ingenuity.”

Comments closed on June 20. Vidal said the office received 66 unique submissions that, for the most part, agreed with fundamentals that 1) an inventor must be a natural person, 2) that the focus of the inquiry should be on human contribution and 3) that AI-assisted inventions are not categorically unpatentable, Vidal said.

Former USPTO Directors Iancu and David Kappos recently authored an op-ed for the *Wall Street Journal* charging that the inventorship guidance “could inadvertently discourage inventors from making use of artificial intelligence tools.”

Vidal cited USPTO rejection data that she said shows, since 2019, the corps-wide SME (subject matter eligibility) rejection rate has



“We want to make sure we strike the right balance so that AI is used for innovation but isn’t used to lock up innovation.”

—USPTO DIRECTOR KATHI VIDAL

been consistently below 11 percent. It was 8.7 percent in February 2023.

“If it’s the same playbook, we can create consistency. The [eligibility] guidance is working. We weren’t trying to change it, just add more clarity and give examples in the AI context.”

Earlier input was divided

The USPTO issued a request for comment (RFC) in 2019 asking for input on patenting AI inventions. Those comments were summarized in a report issued in October 2020 and found that patent system users were divided on whether the current intellectual property framework was sufficient to address AI inventions or if new laws are needed.

The updated guidance notes that “some commenters were concerned that AI inventions are at risk under the subject matter eligibility analysis because they can be characterized as abstract ideas.”

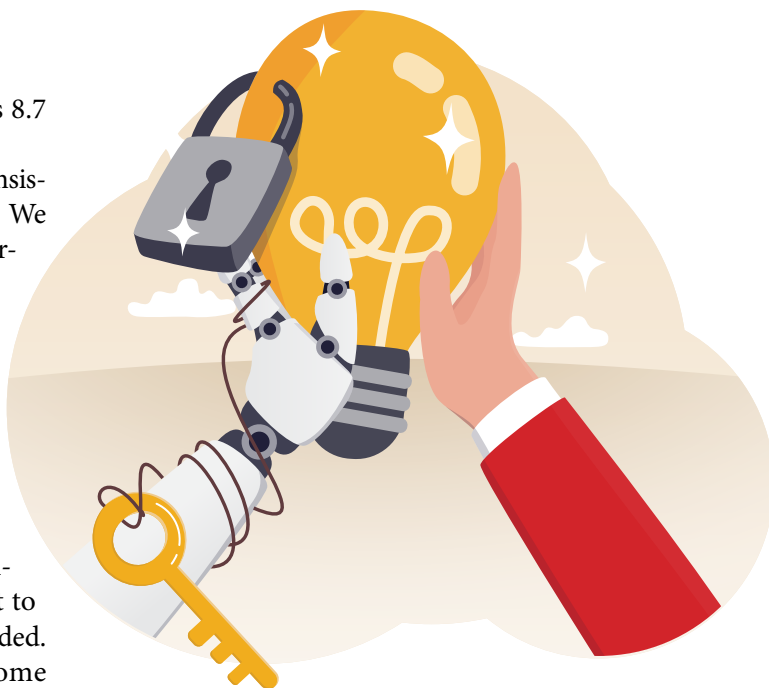
According to the guidance, stakeholder feedback has indicated “that when considering the subject matter eligibility of AI inventions, there are certain areas of particular concern: (1) the evaluation of whether a claim recites an abstract idea in Step 2A, Prong One; and (2) the evaluation of the improvements consideration in Step 2A, Prong Two.”

The guidance thus includes several examples of AI claims that do and do not recite abstract ideas to assist examiners in this evaluation. It first provides several “non-limiting hypothetical examples of claims that do not recite an abstract idea” and goes on to provide examples from recent U.S. Court of Appeals for the Federal Circuit cases of representative claims.

Goal is more clarity

“I hope people will see this for what it is—a really good-faith and hard-worked process to bring something to the public that will impart more clarity and certainty, and at the same time reinforce that we want people to have trust in AI and use it responsibly to bring innovative products to market,” Vidal said.

The new eligibility guidance will be open for comment for a 60-day period from publication. Quinn asked Vidal what kinds of comments



the USPTO is most likely to consider, since the guidance was effective July 17 and has already undergone an extensive vetting process, including with international counterparts.

Citing the AI inventorship guidance again, Vidal said one comment the USPTO is considering implementing asked for an example in the design patent context. “That’s a good comment. It will make it stronger,” she said.

Legislation welcome

Vidal also told IPWatchdog she would welcome potential eligibility legislation in the sense that “anything that brings more clarity and certainty when it comes to eligibility would be positive.”

But with respect to comments she has heard about waiting for legislation rather than issuing guidance now, Vidal said the office simply can’t:

“We have to operate the agency right now. If legislation happens, we may need it in certain areas as we get comments back. But where we can solve for things, we need to do what’s best for the country right now with what we have available.” 🗨️

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



IoT Corner

Samsung recently launched an IoT-enabled credit card with tracking capabilities.

The clumsily named **KB Kookmin SkyPass IoT Titanium Card** has Bluetooth Low Energy built in that allows users to locate a missing card with a smartphone via the SmartThings Find app. The card is a derivative technology of the Samsung Galaxy SmartTag2, which is similar to Apple AirTags.

Issued by American Express, the card can also be used in reverse to find a missing phone by pressing a button at the bottom of the card. One thousand of the cards will initially be released in South Korea, lasting 30 days on a single charge

—Jeremy Losaw



Wunderkids

This month's entry is more of a "Where Are They Now?" because we don't know. In 1996, fifth-grader **Richie Stachowski** invented the Water Talkie—a device consisting of a small plastic cone, blow valve and mouthpiece that allows people to talk to each other underwater. He sold 50,000 units to Toys 'R' Us, started a company called Short Stacks, and at 13 sold the company to San Francisco-

based Wild Planet Toys for millions of dollars. Extensive research here has uncovered nothing new about "Richie Rich," who would be 38 or 39 today.



What IS That?

"ENHANCE CHICKEN TRAINING TO THE FULLEST," says the **chicken harness** product description on Amazon.com. Judging by customer response, these have a viable purpose—including as a way to keep your fowl contained while you do maintenance on their living quarters. And the bow tie is perfect for those elegant nights on the town.

Get Busy!

It's worth one last reminder: The in-person component of Invention-Con 2024, the USPTO's annual conference highlighting education and inspiration about intellectual property, is August 16 from 10 a.m. to 2 p.m. at its headquarters in Alexandria, Virginia. uspto.gov/inventioncon

WHAT DO YOU KNOW?

1 What was invented first—the electric clock, or the electric razor?

2 Which celebrity inventor said this? "Keep the faith, don't lose your perseverance and always trust your gut instinct."

- A) Julie Newmar B) Paula Abdul
C) Jamie Lee Curtis D) Hedy Lamarr

3 **True or false:** Trade secrets only apply to tangible products.

4 The field of artificial intelligence was formally founded in which year?

- A) 1956 B) 1977
C) 1991 D) 2012

5 **True or false:** Despite Tesla Inc.'s open-source philosophy, it has hundreds of patents associated with the brand.



ANSWERS: 1. Electric clock, 1840, attributed to Alexander Bain of Scotland; electric razor, late 1920s, by Col. Jacob Shick. 2. B. 3. False. They can involve intellectual assets such as business strategies and market intelligence. 4. A. At a conference at Dartmouth College, where the term originated. 5. True.

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