

IN COOPERATION WITH



UNITED STATES
PATENT AND TRADEMARK OFFICE ®

NOVEMBER 2022 Volume 38 Issue 11

Inventors

DIGEST

Gift Guide

HOLIDAY INSPIRATION FROM
INDEPENDENT INVENTORS

Smells Like Musk
REACTION TO HIS
ANTI-PATENT TIRADE

\$5.95

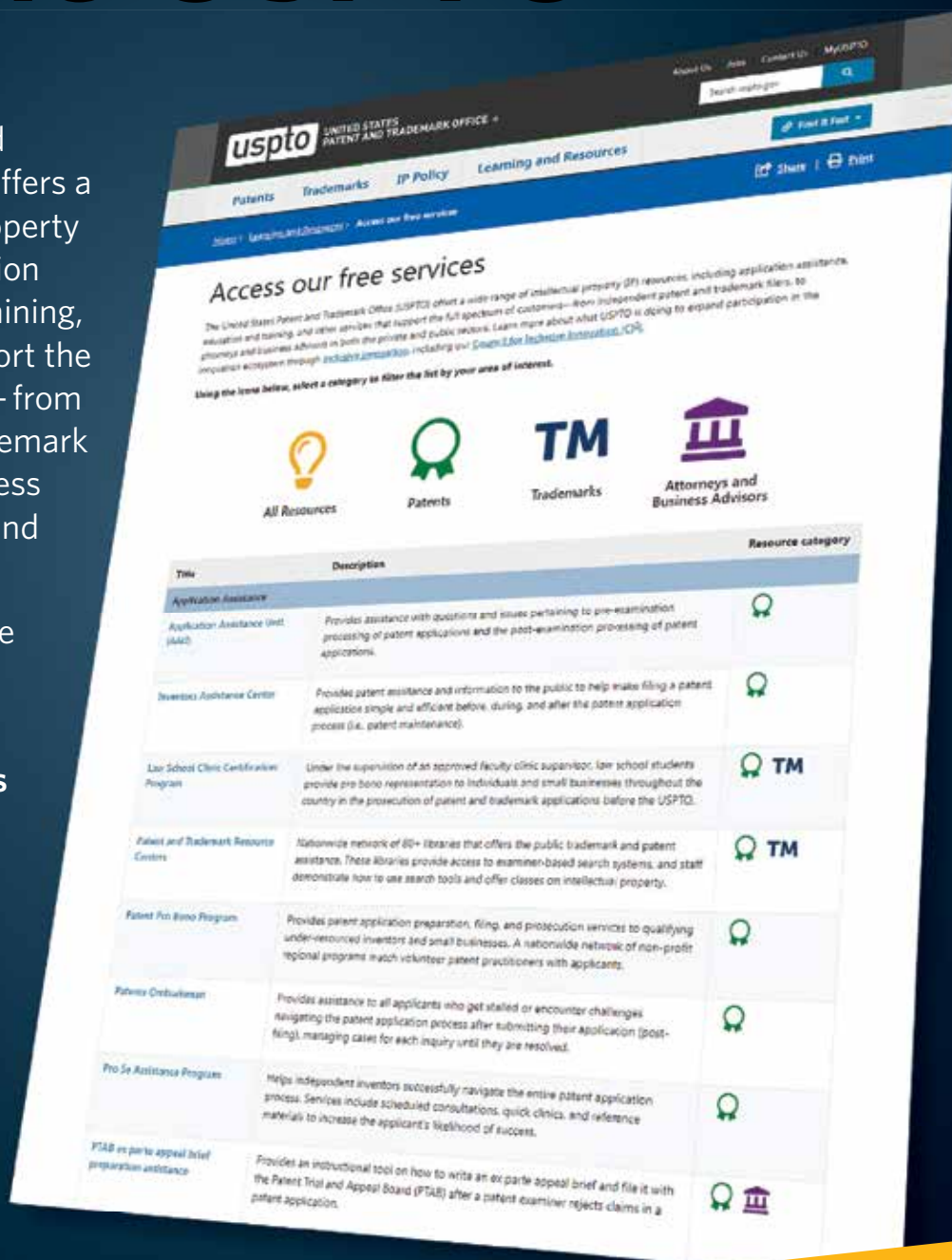
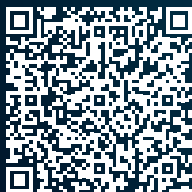
FIRST STANDARD
US POSTAGE PAID
PERMIT 38
FULTON, MD

Access free services from the USPTO

The United States Patent and Trademark Office (USPTO) offers a wide range of intellectual property resources, including application assistance, education and training, and other services that support the full spectrum of customers — from independent patent and trademark filers, to attorneys and business advisors in both the private and public sectors.

Browse our list of nearly three dozen free services and resources here:

www.uspto.gov/freeservices



UNITED STATES
PATENT AND TRADEMARK OFFICE ®

Contents

November 2022 Volume 38 Issue 11



42



22



Features

- 28 Of One Mind, One of a Kind**
Dr. Gary Michelson's Persistence
- 30 Holiday Gift Guide**
Inventors Supporting Inventors
- 36 USA James Dyson Award**
Repositionable Scoliosis Brace
- 38 Collegiate Inventors Winners**
Inventors Hall of Fame Awards

Inventor Spotlight

- 22 Easy on the Eyes**
Duo's Thermal Meditation Device
- 24 That's One Smart Cat**
The Thrill of the Hunt, at Home

Departments

- 6 Your USPTO**
News, Upcoming Events
- 10 Editor's Note**
'Earth to Alien ... '
- 11 Everybody's Talking**
Conversation Pieces
- 12 Bright Ideas**
Innovation That Shines
- 14 Time Tested**
The Electric Flat Iron
- 16 Lander Zone**
When Your Patent is Rejected
- 18 Social Hour**
Is Your Plan Working?
- 40 Prototyping**
Innovative Italy
- 42 IP Market**
Sniffing Out the Musk Machismo
- 44 Eye on Washington**
Tough Questions in Prince Case
- 46 Inventiveness**
Focus on the Fun and Fascinating



Give no quarter to Patent Pirates.

Or they'll take every
last penny.

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



SaveTheInventor.com

Inclusive Innovation's Biggest Push Yet

5 new leaders of USPTO CI2 will develop a national strategy



Left to right:
Alejandra Castillo,
Don Cravins Jr.,
Laurie E. Locascio,
Sethuraman
Panchanathan,
Shira Perlmutter

THE QUEST for full inclusiveness in American entrepreneurship and innovation now has a fuller commitment throughout U.S. government.

A “whole-of-government” approach to this mission was formalized with the recent announcement that the USPTO’s Council for Inclusive Innovation (CI2) added five co-vice chairs to the council. U.S. Secretary of Commerce Gina Raimondo, chair of CI2, and USPTO Director Kathi Vidal said the new leaders are:

- **Alejandra Castillo**, assistant secretary of commerce for economic development;
- **Don Cravins Jr.**, under secretary of commerce for minority business development;
- **Laurie E. Locascio**, under secretary of commerce for standards and technology

and National Institute of Standards and Technology director;

- **Sethuraman Panchanathan**, National Science Foundation director; and
- **Shira Perlmutter**, register of copyrights and director of the U.S. Copyright Office.

These government leaders will work with council members—executives from industry, academia, nonprofits, and government—to develop a National Innovation Strategy and to drive fast, sustainable change. The leaders recently met to discuss concrete objectives.

Recent USPTO data say that only 12.8 percent of inventors listed on patents granted in a single year are women, with little to no data on the participation of other underrepresented groups.

The USPTO also reports that industries that intensively utilize intellectual property protection account for more than 41 percent of U.S. gross domestic product and employ one-third of the total U.S. workforce. Workers in IP-intensive industries earn 60 percent higher weekly wages on average versus those in other industries.

“I am excited to welcome these incredible leaders in government to serve on the board of CI2 where they will bring their extensive experience supporting U.S. businesses and inventors to create a more inclusive and expansive innovation ecosystem,” Secretary Raimondo said.

NEWS FLASH

VIDAL TO CO-CHAIR NACIE

USPTO Director **Kathi Vidal** has been appointed by U.S. Secretary of Commerce Gina Raimondo as a federal co-chair of the National Advisory Council on Innovation & Entrepreneurship. NACIE is a federal advisory committee managed by the U.S. Economic Development Administration’s Office of Innovation and Entrepreneurship. Committee members work to identify and recommend solutions aimed at perpetuating the innovation economy—including growing a skilled STEM workforce and removing barriers for entrepreneurs ushering innovative technologies into the market—while facilitating federal dialogue among the innovation, entrepreneurship, and workforce development communities.



For additional information on the council, please see uspto.gov/initiatives/equity/ci2.

Rocking the Stadium Tour

USPTO trial judges meet with law students who are interested in intellectual-property related careers

AFTER MORE than three years of planning and postponement due to the pandemic, judges from the United States Patent and Trademark Office recently arrived at the University of Oregon for the first stop on the now-resumed Stadium Tour.

With the help of Patent Trial and Appeal Board (PTAB) and Trademark Trial and Appeal Board (TTAB) judges, the Stadium Tour is designed to increase the public's access to board proceedings that would otherwise only be available in Alexandria, Virginia.

The day before each board held its hearings, the group of judges traveled from Portland to meet with law students at the University of Oregon's main campus in Eugene and Willamette University in Salem.

"We don't get to come out to the law schools, but maybe once or twice a year, max," said Judge Georgianna Braden, lead administrative patent judge with the PTAB. "So, the fact that we were able to come out here this year has just been incredible, and we are thrilled!"

Judge Braden said this event is called a "Stadium Tour" as a nod to stadiums being the largest venues for musical acts, and the tour is as close to being a rock star as it gets for a judge at the USPTO. She also had a very specific message that she wanted to share with every student she met on the trip:

"I want you to understand, this is not a cookie-cutter world. You don't have to take the same pathway of going to this exact same school, clerking with this exact same judge going to this exact same large law firm doing this document review, and then becoming a partner in order to be able to get the job of your dreams.

"And I'm telling you, this is the job of my dreams. It is absolutely fantastic."

The faculty were instrumental in coordinating and planning for the additional meet and greet with the students. Professors stressed the importance of opportunities where students can ask questions and interact with professionals as



the students contemplate their future careers.

"It was nice to hear the judges talk about the pathways that they each took to get to the positions that they are in today," said Kristie Gibson, assistant clinical professor and supervising attorney for the Business Law Clinic, University of Oregon. "I know a number of our students are very interested in intellectual property, but they're not quite sure what the options are that are available and didn't realize that working with the USPTO might be something that they could explore in the future."

Students ranging from third-year law students to as young as a high school senior were just as enthusiastic about meeting the 11 board members and asking about various pathways of an intellectual property career.

"The judges visiting our campus makes us feel seen, and that kind of direct connection with them is incredibly inspirational and motivational for a lot of students who may not have even had an interest in intellectual property to begin with," said Simmone Landau, president of the Law of IP Club, University of Oregon.

On Day 2 of the visit, the PTAB and TTAB held hearings at the University's Portland campus. This included a question-and-answer panel with a mix of judges from both boards. The panel answered questions regarding how boards are conducted and what judges find most impactful when making their decisions.

Judges from the USPTO visit with law students during a campus visit at the University of Oregon in Eugene.



Your Second Chance

Understanding the process of filing an ex parte appeal before the PTAB

IF YOU ARE dissatisfied with a USPTO examiner's rejection of your patent application, you have recourse.

You can have the decision reviewed by administrative patent judges (APJs) of the USPTO's Patent Trial and Appeal Board (PTAB) in a process called an *ex parte* appeal.

Ex parte means there is only one interested party. An applicant may file such an appeal if an examiner has finally, or at least twice, rejected his or her patent application.

The applicant (who becomes an "appellant" in this PTAB proceeding) files a notice of appeal, pays the requisite fee, and then has two months to file an appeal brief. This provides the appellant an opportunity to explain to the PTAB why the examiner erred, by citing evidence in the record and/or making legal arguments.

Importantly, any argument not raised in the appeal brief may be regarded as waived in the proceeding.

The examiner addresses the arguments in the appeal brief in an examiner's answer, which is another brief. In this response, the examiner may maintain or modify each rejection. The examiner may also withdraw any pending rejection or introduce a new ground of rejection.

If the examiner maintains at least one rejection, or raises a new ground of rejection, the appeal process continues. If the examiner's answer includes a new ground of rejection that is designated as such, the appellant must either (1) request that prosecution before the examiner be re-opened, or (2) request that the appeal be maintained, by filing a reply brief. Failure to exercise one of these options results in dismissal of the appeal.

If the appellant believes the examiner's answer includes a new ground of rejection—but is not so designated by the examiner—the appellant may submit a petition to the USPTO director to review the examiner's failure to designate the new ground. These circumstances are not common.

More commonly, to proceed with the appeal the appellant pays an appeal brief forwarding fee and may also optionally file a reply brief in response to the examiner's answer, though this is not required. The scope of any reply brief must be limited to arguments raised in the appeal brief, and should be responsive to issues raised in the examiner's answer (as noted above, a reply brief is required if the examiner's answer designates a new ground of rejection and the appellant elects to maintain the appeal).

In addition, the appellant may request an oral hearing (which may be conducted in person, or by telephone or video) before the panel of APJs that will decide the appeal. An appellant typically has 20 minutes of oral argument to present

NEWS FLASH

TRADEMARK APPLICANTS DEADLINE

Beginning Dec. 3, 2022, instead of the current six months, trademark applicants will have three months (with a possible three-month extension) to respond to an office action issued during the examination of a trademark application at the USPTO.

The same change went into effect for post-registration office actions on October 7. By shortening response time, the USPTO aims to decrease the time it takes to get and maintain a registration; and provide flexibility to request additional time to respond to more complex office actions.



the case to the panel—during which the appellant may explain the arguments already made in the appeal brief and respond to any questions from the panel of APJs.

Panels will almost never consider a new argument at a hearing— unless, for example, some intervening case law occurred between the briefing and hearing.

The panel of APJs will consider all arguments and evidence in the record and confer with each other. The panel will determine whether the examiner erred as to the rejection of each claim argued over in the briefing and then will issue a written decision of its findings and conclusions. The panel may also enter a new ground of rejection that the examiner did not include.

As for the examiner's rejections on appeal, the PTAB panel's decision may: (1) affirm all the rejections; (2) reverse all rejections; (3) affirm the rejections in-part—i.e., at least one rejection is affirmed and at least one rejection is reversed; or (4) remand the case to the examiner for further determinations.

If the panel reverses all rejections, the application returns to the examiner—who must then either allow the claims or continue prosecution with a new rejection.

If the panel affirms any rejections, the appellant has many options.

The appellant may file a request for rehearing with the PTAB to allege some misunderstanding by the panel in its decision to seek a different outcome. The appellant may seek judicial review of the PTAB's decision, either via litigation against the USPTO in the U.S. District Court for the Eastern District of Virginia, or via direct appeal to the U.S. Court of Appeals for the Federal Circuit. The appellant may also submit a request for continued examination (RCE) to continue prosecution before the examiner.

Resources for guiding an applicant through the *ex parte* appeal process are available on the PTAB's website at uspto.gov/patents/ptab/appeals.

WHAT'S NEXT

BLOCKCHAIN & IP EAST: On November 15, 1-4 p.m. ET, hear about innovations and inventions in supply chain management, credit cards, insurance, and banking that companies along the United States eastern seaboard are pursuing. These real-world use cases will delight and inspire your outlook.

For more information, or if your company would like to join this spotlight, email EasternRegionalOutreachOffice@uspto.gov. A question-and-answer session will follow the presentation. Please send your questions in advance or during the event to the above email address.

INSPIRING VETERANS: Join the online 2022 Veterans Innovation and Entrepreneurship Program, November 30, 1-4 p.m. ET. Though designed for veterans and active military personnel, the event is open to everyone.

Hear from innovative veterans about their journeys toward successful entrepreneurship. You can also learn about key resources available to entrepreneurs and inventors including training, counseling, and access to capital from representatives of entrepreneurial organizations such as the U.S. Small Business Administration, Bunker Labs, and the D'Aniello Institute for Veterans and Military Families at the University of Syracuse.

A detailed agenda and speaker biographies will be posted as the event approaches.

Register at uspto.gov/events.



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

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

'Earth to alien ... Earth to alien ...'



"I'm not an alien ... but I used to be one."

Elon Musk's tweets are often out of this world. But when you're Earth's richest person, people and the media from our humble little planet are going to listen to you far more than they should.

So when the SpaceX and Tesla CEO recently said "patents are for weak people," Musk had another E.F. Hutton moment. But actually, it was just another hypocritical spewing from a guy who as of September 13 owned 18 patents (per leading innovation consulting firm GreyB), and who, in his clumsily titled 2014 Tesla manifesto "All Our Patent Are Belong To You," said patents "entrench the positions of giant corporations"—while he himself leads giant corporations.

Oh, and according to *Inventors Digest* contributor Louis Carbonneau's column starting on Page 42 in this magazine, Tesla has been sued for infringement 20 times in the past three years.

Bottom line: Musk is out of touch with the independent inventor.

I asked senior *Inventors Digest* correspondent Jack Lander about this. He said "Musk speaks for that rare class of inventor-entrepreneur who is pushing the cutting edge of technology, and who has access to essentially unlimited finance. His statement is dangerous for the minds of independent inventors of average means whose ambitions are modest."

Edith G. Tolchin, an *ID* contributor since 2000 and author of inventing books that will include "Secrets of Successful Women Inventors" in 2023, had a tad stronger reaction:

"Over my 30-plus years of working with and interviewing inventors, I have seen far too many middle-class (and less-fortunate) inventors fight far too hard both to obtain patents, as well as deal with infringements—often spending their life savings because they believe in their inventions. Elon Musk is an untouchable gazillionaire who only thinks of himself and not the great women and men inventors who built this great country."

Shawn Moye, inventor of the E-Sports Trainer, had this savvy take regarding Musk's boast that anyone is allowed to use Tesla's patents "in good faith": "Musk's patents are in place to define exactly what *is* considered good faith. The patent gives us the legal right to decide how our IP can be used."

So it's not necessarily bad that Elon Musk rails against patents. His contradictions underscore the many ways in which U.S. patents help fuel our country's relentless innovation spirit—on this planet that the rest of us call home.

—Reid

(reid.creager@inventorsdigest.com)

Inventors

DIGEST

EDITOR-IN-CHIEF
REID CREAGER

ART DIRECTOR
CARRIE BOYD

CONTRIBUTORS
STEVE BRACHMANN
ELIZABETH BREEDLOVE
LOUIS CARBONNEAU
JUSTIN CHAPMAN
JACK LANDER
JEREMY LOSAW
EILEEN MCDERMOTT
APRIL MITCHELL
EDIE TOLCHIN

GRAPHIC DESIGNER
JORGE ZEGARRA

INVENTORS DIGEST LLC

PUBLISHER
LOUIS FOREMAN

WEBSITE ADMINISTRATOR
ELIZABETH BREEDLOVE

FINANCIAL CONTROLLER
DEBBIE MUENCH

© 2022 Inventors Digest, LLC. All rights reserved. Inventors Digest, LLC is a North Carolina limited liability company and is the publisher of *Inventors Digest* magazine. INVENTORS DIGEST and INVENTORS' DIGEST are trademarks of Inventors Digest, LLC. Reproduction or distribution of any materials obtained in this publication without written permission is expressly prohibited. The views, claims and opinions expressed in article and advertisements herein are not necessarily those of Inventors Digest, LLC, its employees, agents or directors. This publication and any references to products or services are provided "as is" without any expressed or implied warranty or term of any kind. While effort is made to ensure accuracy in the content of the information presented herein, Inventors Digest, LLC is not responsible for any errors, misprints or misinformation. Any legal information contained herein is not to be construed as legal advice and is provided for entertainment or educational purposes only. Interested parties and inventors seeking legal advice should consult a lawyer.

Ad rates, subscriptions & editorial content:
520 Elliot Street
Charlotte, NC 28202
info@InventorsDigest.com
www.InventorsDigest.com
reid.creager@inventorsdigest.com

CORRESPONDENCE

US Inventor issues call to action

There is an effort underway to attach a patent bill (that is bad for American inventors and startups) to the National Defense Authorization Act (NDAA). The bill is the Pride in Patent Ownership Act (PPOA).

The NDAA is a bill that will pass, so anything successfully attached to it will pass. Attaching it to the NDAA is how it gets around serious discussion, and defeat, by those who care at the Judiciary Committee.

U.S. Rep. Bill Posey (R-Fla.) has written a letter opposing the attachment of the PPOA to the NDAA to the chair and ranking members of the Committee on Armed Services. You can read his letter here: usinventor.org/wp-content/uploads/Posey-Letter-to-stop-NDAA-PPOA.pdf

Two things are needed now:

Please call the U.S. Capitol switchboard number (202-224-3121) and ask to be transferred to the office of your U.S. representative. Say something like this:

"Hello. My name is _____ and I am a constituent. I am concerned about the possible inclusion of the controversial Patent Pride in Ownership Act (PPOA) on the National Defense Authorization Act (NDAA). The PPOA would further complicate areas of patent law that would be harmful to cutting-edge fields

in technology, innovative startups, inventors, research universities, etc.

"The Pride in Patent Ownership Act will severely damage startup formation and work to perpetuate big tech monopolies. Please sign Rep. Bill Posey's letter that opposes this amendment in the NDAA. Thank you."

Email your representative the same message and include Rep. Posey's letter. If you can only do one of these, make the call.

—US INVENTOR

(Editor's note: The NDAA is legislation that Congress has passed annually for 60 straight years to change policies and organization of U.S. defense agencies, and provide guidance on how military funding can be spent. The House approved the bill for the 2023 fiscal year in July, but congressional insiders say the Senate won't vote on it until after the November elections and perhaps not until December.)

CONTACT US

Letters:

Inventors Digest
520 Elliot Street
Charlotte, NC 28202

Online:

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

ED SHEERAN, LAWSUITS ARE THE SHAPE OF YOU



Pop hit master **Ed Sheeran** will have to go to trial over another complaint that his music borrowed a little too heavily from a previous work.

A federal judge recently denied Sheeran's request to throw out an infringement lawsuit over his hit "Thinking Out Loud." Structured Asset Sales, which owns a partial stake in the copyrights of Ed Townsend—Marvin Gaye's co-writer in the 1973 hit "Let's Get it On"—claims "The melodic, harmonic, and rhythmic

compositions of 'Thinking' are substantially and/or strikingly similar to the drum composition of 'Let's.'"

Sheeran's lawyers contend the Gaye song elements were too common to be copyrighted and that the lawsuit is "baseless," according to the BBC.

Sheeran settled a lawsuit over one of his other hits, "Photograph," for \$20 million in 2017. Earlier this year, he won a plagiarism lawsuit in the U.K. over his hit "Shape of You."

BRIGHT IDEAS

Gulp

SELF-CLEANING
WASHING MACHINE
MICROPLASTIC FILTER
gulp.online

Gulp's makers say it was created exclusively to keep microplastics out of the environment and our oceans.

Every time we do laundry, thousands of microplastics are released from our washing machines and pumped into our waterways. Gulp's makers say it is the first sustainable, long-lasting solution to microplastics with no additional filter costs and no disposable parts.

The product's patented, self-cleaning technology means you never need to replace the filter. It works with any laundry detergent and any wash cycle.

Gulp will retail for about \$280, with shipping for crowdfunding backers set for June 2023.



Amarath

TWIST-DRAIN-TRIM
VASE COLLECTION
amarathvase.com

Amarath vases add ease and functionality to the process of draining and replacing water in flower vases.

Twist the vase at the midsection to drain the old water.

Twist the vase again to remove the bottom of the vase and expose the floral stems for trimming, which facilitates better water absorption resulting in longer-lasting flowers.

Sturdy and well made of plastic and marble powder, the vases come in six different colors and two size options. There is a lifetime warranty on any leaks or cracks. Hand wash only.

The vases sell for \$39.99 (reduced price as of press time), with free shipping on orders of \$50 or more.



Little Rebels

EDUCATIONAL
PLUSH TOYS

wearelittlerebels.com

This line of toys is designed to teach children about the accomplishments of female role models in an interactive way.

The Little Rebels app (available for Android and iOS) teaches about the accomplishments of featured products such as Marie Curie, Malala Yousafzai, Amelia Earhart and Mary Jackson (the latter sold out as of this writing). The toy's stated goal is to "teach our kids about diversity, inclusion, courage, respect, equality and how to speak up for themselves."

Little Rebels paired with The Malala Fund and is pairing with other foundations as well, so a percentage of the company's revenues are donated to help girls get access to education.

Each plush toy costs \$28 on the product website.



**"Innovation is
creativity with
a job to do."**

— JOHN EMMERLING



Shelfy

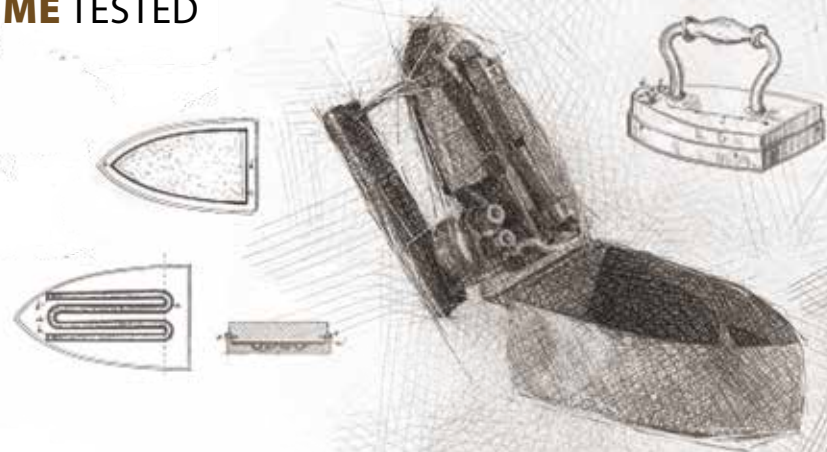
SMART AIR PURIFIER
FOR REFRIGERATOR

vitesy.com

A smart device meant to make food last longer, reduce bacterial load and remove odors from your refrigerator, Shelfy is a small and compact purifier that allows your food to last up to 12 days longer in the fridge. This protects against food waste and saves money.

The product pairs with the Vitesy Hub App connection, Google Home and Amazon Alexa. It features three operation modes: Just select your favorite mode based on how full your refrigerator is, and place Shelfy wherever you want. It also has a door-opening sensor, as well as a reusable and washable filter.

Shelfy will retail for \$165, with shipping set for June 2023 for crowdfunding backers.



Smooth and Steady

THE ELECTRIC FLAT IRON, FIRST PATENTED 140 YEARS AGO, REMAINS A PERSONAL GROOMING STAPLE **BY REID CREAGER**

After his patent, Henry W. Seely found sales were flat.

STELLA! No, not *that* Stella from “A Streetcar Named Desire.” “Stella” was the name of a critically acclaimed TV comedy-drama (2012–17), starring Karen Paullada as a South Wales single mother who made a living by ironing others’ clothes.

That there is still a need for this service is a tribute to the laziness of many human beings—and to the staying power of the electric flat iron.

Ancient predecessors

It’s 140 years old now. Henry W. Seely of New York City is its generally acknowledged inventor, granted U.S. Patent No. 259,054 on June 6, 1882. (Seely might have been steamed to know that many online sources refer to him as Seeley, even though the correct spelling is clear in the patent.)

One could claim Seely’s device—which used a carbon arc to create heat—was an innovation and not an invention, because ironing clothes with heating materials goes back many centuries and has evolved through several iterations.

Various reputable sources say that as far back as 400 B.C., Greeks heated a round bar known as a goffering iron to produce pleats on robes.

The Romans used a metal paddle and beat clothes to remove wrinkles, which may have had a dubious efficacy but certainly could relieve frustration after a tough day at the chariot races. The Chinese would use a scoop heated with coal or sand and rub it over clothing.

It is often reported that in the West, smoothing stones were the earliest ironing devices (8th and 9th centuries). During the Industrial Revolution, irons were filled with hot coals.

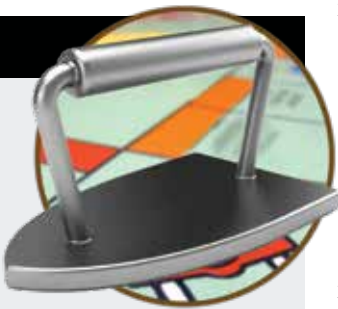
The Mrs. Potts Removable Handle Iron became a bellwether grooming tool in the late

A MONOPOLY MAINSTAY

The iron was one of the original six pieces of the original “Monopoly” game, circa 1935. The others were the top hat, thimble, shoe, battleship and cannon; the racecar was added later that year.

A public vote in 2013 resulted in the iron being replaced by a cat (eventually named Hazel). The cannon is also gone, with other pieces coming and going during the past 90 years or so.

Earlier this year, the iron had a chance to return when the public was invited to unretire one of the game’s pieces. But the thimble won the vote.



1800s and through the 1940s. Also called the Cold Handle Sad Iron, it featured a detachable walnut handle so several irons could be on the stove at one time and the handle swapped between several iron bodies.

Sad irons—apparently so called because of their heavy weight—can bring happy returns as antiques. A couple of them were offered on etsy.com at this writing, with a 19th-century, 20.5-lb., Sweden Husqvarna 1 sad iron selling in the \$780 range on eBay October 1.

Getting warmer, but ...

Seely's innovation had built-in coils and was heated on a rack. It was a step up technologically, but the heating method that he and others employed in these early electric irons (explained in the accompanying box) was unsafe and required a long time to produce heat. The product did not sell well.

Ironing clothes with heating materials goes back many centuries and has evolved through several iterations.

The introduction of irons using electrical resistance instead of a carbon arc to generate heat came in 1892. The first companies to do so were Crompton and Co. and General Electric Co., which allowed for regulation of heat in the iron.

A game-changer came in the early 1900s, when irons were made with electric cords. No longer did an iron have to be constantly reheated.

In the 1920s, Joseph Myers developed the first reliable thermostat and temperature controller for an electric iron. It used metal strips that bent and changed under different temperatures, thereby breaking or forming a circuit that heated the iron. The user could manipulate how easily the strips bent—i.e., how much heat was necessary to bend them and break the circuit that powered the heater.

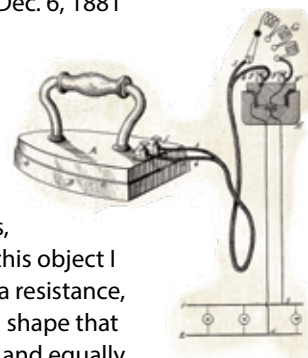
The Eldec Co. introduced the steam iron in 1926. Improvements in succeeding decades included an aluminum sole plate that would not

PATENT PATHWAY



Henry W. Seely's patent application, filed Dec. 6, 1881 (exactly 6 months before the patent was granted), describes his invention's objective and process:

"The object of my invention is to utilize electric currents derived from any suitable source of electric energy for the purpose of heating flat-irons, fluting-irons, and other similar utensils. To accomplish this object I place within the iron and close to its face a resistance, preferably of carbon, and of such size and shape that it will heat the face of the iron sufficiently and equally. This resistance has terminals, by means of which it may be connected in an electric circuit, preferably a multiple-arc circuit of an electric lighting system."



rust; irons capable of both wet and dry operation; and nonstick plates.

Still, if you use an iron with any regularity, you may see room for more improvement in terms of better regulation of heat and steam. Our techno-charged world, which has resulted in dramatic improvements to numerous products in recent years, still has some bumps to smooth out with the electric flat iron. 📌

INVENTOR ARCHIVES: NOVEMBER

November 24, 1874: U.S. Patent No. 157,124 was granted to **Joseph Glidden** of De Kalb, Illinois, for barbed wire fencing.

The patent application says the invention was designed to prevent cattle "from breaking through wirefences." Today, barbed wire is also used for prison walls, as a training tool for simulating combat conditions, and more.

Glidden reportedly was trying to protect his wife's garden from livestock on their farm. Red Brand fence products wrote that he "created his own design with a modified coffee mill to twist two strands of wire to form loops for barbs. ... Glidden's design was easy to manufacture, cost effective, and wildly popular across the American plains."

By the turn of the century, more than 500 barbed wire patents were issued in the United States.



Patent Rejected?

Don't Be Affected

CONSIDER 3 OPTIONS, REALIZING THAT SOME PRODUCTS AREN'T PATENTABLE DUE TO ABUNDANT PRIOR ART

BY JACK LANDER

THE UNITED States Patent and Trademark Office rejected your application. Now what?

It's not the end of the world. You have at least three options:

- Re-examine your invention's market.
- Go on to another invention.
- Produce and sell your invention.

By re-examining the market, I mean the potential market for your invention with or without a patent.

If there appears to be a market, study each brand in detail. Examining a display model is helpful. Owning and using the product is best, of course.

Very few products are perfect. Is there a deficiency that you could fix by inventing something novel? Can you invent an accessory that will make the product more effective? Did I mention that Amazon.com is a good place to start?

Kitchen musings

This may seem a stretch, but my experience is that kitchen appliances and tools often can be improved.

I recently bought a new coffee maker. It was made by Black & Decker, a company that has made trade tools since 1910, but its entrance into the kitchen tool market appears to be relatively recent.

I like its coffee maker for simplicity and ease of cleaning. But I quickly discovered what I judged to be two flaws.

The first is, the pilot light warning that the heater that keeps the coffee warm after brewing is barely visible. I burned a finger the second day I made coffee.

Also, the filter holder has a small projection on one side that acts as a handle. When you

insert the holder in its operating position, the handle ends up at on the right side of the tank opening, and when pouring the water into the tank it's easy to pour on the handle, splashing the water all around.

Not a big defect, just one of those annoyances that could have been avoided by placing the notch for the handle on the left side. (Of course, that would annoy left-handed people, but ...)

If the company had patented the inside features of the coffee pot, the position of the notch may have qualified as a valid claim.

My previous coffee maker used a V-shaped filter, and its holder was V-shaped.

It was unstable standing on the countertop. I often accidentally knocked it over after loading the coffee.

A simple adaptor to keep the holder upright and stable was needed. I doubt that such an accessory would have been patentable, but it may have had an exclusive market if produced without a patent.

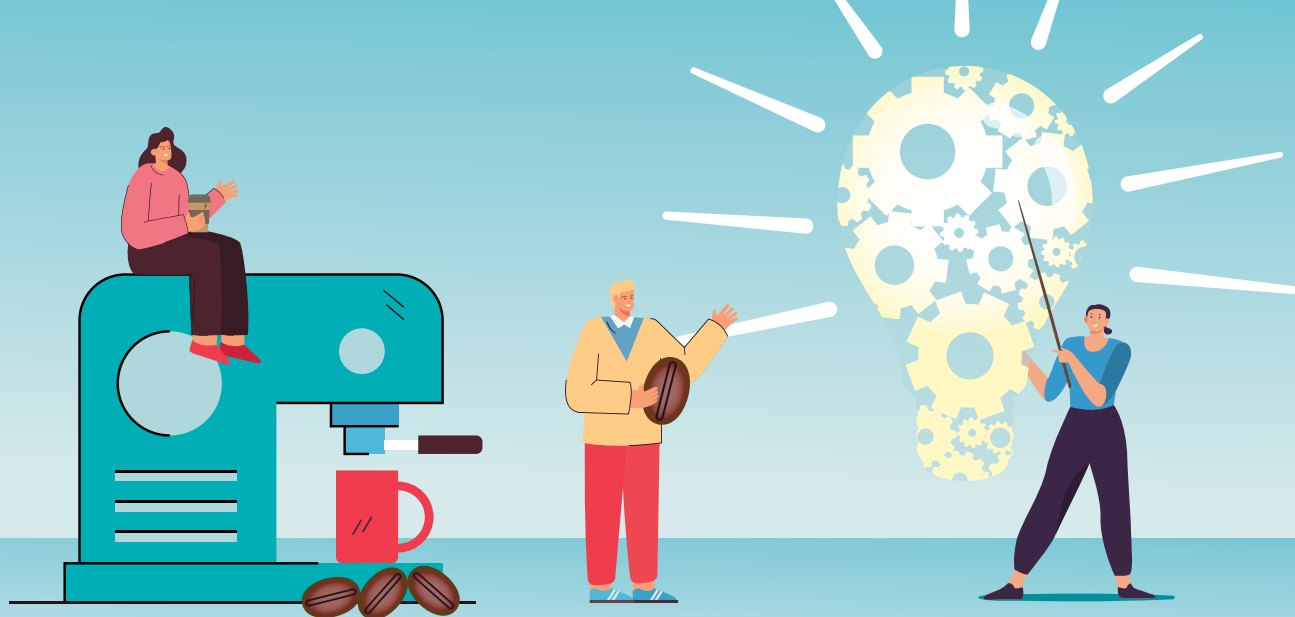
Ponder new fields

In some cases, though, it makes sense to give up your heroic quest to save an invention.

Many things just aren't going to be patentable, most often novel changes or accessories for products that have been around for many years—like electric coffee makers—due to the abundance of prior art, patented or not.

In that case, it's time to go on to your next invention.

If you don't already have your new invention in mind, ask yourself what has recently changed. Maybe a change has created a new field for invention.



Is there a deficiency that you could fix by inventing something novel? Can you invent an accessory that will make the product more effective?

Ford's first car, the Quadricycle, appears to be the first major entry in the field of combustion-engine cars. That was in 1896. However, the first battery-driven car was displayed at the Chicago World's Fair three years earlier.

So, the old electric car that now promises to obsolete the combustion engine and use of gasoline is a prime example of a well-entrenched industry that is changing dramatically. Its change produces opportunities for inventions relating to recharging of the car's batteries at home.

However, the relatively rapid entry of electric cars is attracting industry-sponsored inventors around the world. A less technical field may be more promising for independent inventors.

Producing: Pros and cons

Again, I suggest that Amazon is a convenient first place to assess your prospects for evaluating and entering the market.

Marketing through retail chains is attractive, but that's mainly a pipe dream until you can show a record of sales—inclining sales.

Amazon is less demanding. But you may find that you will be lost among several brand names unless you can present a product that offers an obvious benefit that is not available on the name-brand products.

Another advantage to Amazon is that if you produce an accessory item for a popular

product, you can display it along with the product for which it is an accessory. How would you market it otherwise?

Some products just don't sell well enough, and therefore don't produce an attractive profit, to justify their own space in the typical retail store.

For independent inventors, producing may seem to be a frightening and risky venture. But so is patenting. And in producing, you keep finding ways to make your product better, and to lower its production cost. There are fewer ways that close the door and lock it as there are for patent applications.

Producing does have its frustrations, though. Financing is one of them. And learning how to make products—that is, choosing the optimum manufacturing process for the quantity you think you will sell—is another. I'll address these frustrations in the issues ahead. ☎

EMAIL WITH QUESTIONS

I will appreciate your questions via email at jack@inventor-mentor.com. Truly, I welcome your email, and I promise to answer whether you are just thinking about producing, or you're already a professional who disagrees with me.

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."



PART 2

Is Your Plan Working?

HOW TO MEASURE YOUR SOCIAL MEDIA MARKETING EFFORTS
ON 3 MORE MAJOR PLATFORMS **BY ELIZABETH BREEDLOVE**

THE IMPORTANCE of measuring a social media strategy's effectiveness cannot be overstated. It's crucial to have a social media marketing strategy in place, as well as a plan for how you'll determine whether your efforts are working.

If you aren't aware of which tactics are helping the most and which are falling short, you'll likely end up wasting time and efforts on social media management that ultimately doesn't contribute to your business' overall success.

But with so many different aspects of each social network to consider—not to mention how different one platform can be from another—tracking your success can quickly become very confusing.

Each platform has slightly different metrics that should be monitored to track how helpful your marketing efforts truly are. Last month, I wrote about tracking key performance indicators on Facebook and LinkedIn; this month we'll look at video platforms YouTube, TikTok and Instagram.

YouTube

As of February 2021, data showed that 81 percent of American adult internet users use YouTube—a larger share than any other social network. So, if you're creating video content at all, you need to be posting it to YouTube. But once you get content loaded onto YouTube, which metrics should you track?

Total watch time is the total amount of time users have spent viewing one of your videos.

This metric matters because it helps you know how successful each video is. It's an easy way to see how much time users are spending on a video.

YouTube also allows you to break down this metric further so you can consider different audience demographics, such as subscribers vs non-subscribers. Furthermore, YouTube has made it clear that watch time is one of the performance indicators the algorithm uses to suggest videos to users. In other words, the more people watch your videos, the more your videos will be shown to new people.

Similarly, views are the number of times a user has viewed a video. Views become important when you compare the number of views to the number of impressions, which is when a video's thumbnail is shown to a YouTube user.

Views and impressions are an important aspect of reach—a broad term that describes how many people find your video, how they found it, and how likely they are to watch it.

By measuring and monitoring views and impressions, you can keep track of which video topics, titles and thumbnails tend to lead to more views. You can also compare views to total watch time to get a feel for how much of each video the average user is watching.

Beyond watch time, views and impressions, engagement metrics are also important to track. Engagement metrics measure any sort of interaction with a video, such as how long a user watches it and whether he or she likes (or dislikes) or comments on it.

These metrics, which show how a user responds to a video, can provide you with valuable information about the types of content your target audience enjoys—in addition to providing key signals to the YouTube algorithm that will hopefully further boost your total reach and engagement.



Similar to YouTube, total play time is a great starting point for measuring your marketing results on TikTok.

TikTok

TikTok has been rapidly growing over the past several years. It's a popular social network among Gen Z and Millennials, with over 72 percent of the platform's user base between 18 and 34 as of April 2022, according to Statista.

If you're using TikTok to market your invention, there are a few key metrics to pay attention to as you evaluate your strategy.

Similar to YouTube, total play time is a great starting point. This metric provides context for other metrics by offering a cumulative view of the amount of time a user has spent watching a certain video. It's a great way to compare performance between multiple videos and see which ones are performing best.

TikTok's analytics dashboard also highlights a variety of engagement metrics, including likes, comments and shares. You can use these figures to determine which types of content are likely to resonate best with your audience and get the most engagement, then create more content along those lines. Plus, engaging content is more likely to be favored by the algorithm.

You'll also want to pay attention to video views. TikTok counts a view from the moment a video begins to play, and videos play automatically on

the platform. So video views are a great measure of impressions, because the number gives you an idea of how many people lay eyes on the piece of content.

If you want to look instead at what percentage of people watched a video in its entirety, look at the watched full video metric.

Instagram

Did you know that Instagram is predicted to reach 127.2 million monthly active users in the United States by 2023, according to Statista? If you're not on Instagram yet, now may be a good time to start marketing there.

As with YouTube and TikTok, reach and impressions, video plays and user engagements are important to track and monitor to measure your success on Instagram.

On Instagram, impressions is a measure of how often your content was seen on someone's phone screen, even if it was seen by the same person multiple times. This metric matters because it shows how visible your content is and provides context for other metrics.

For example, two posts could have the same number of likes, but one could have a large number of impressions and one a much smaller

Adjustable-height,
over-the-door hook
everyone can
REACH!



Now available online through
Richards Homewares at
Amazon, Lowe's, Wayfair,
Bed Bath & Beyond, and QVC.

April Mitchell
4A's Creations, LLC
PRODUCT DEVELOPER FOR HIRE
april@4ascreations.com



Hit
your
target



Since 1985, **Inventors Digest** has been solely
devoted to all aspects of the inventing business.
Other national magazines merely touch on
invention and innovation in their efforts to reach
more general readerships and advertisers. Advertise
with *Inventors Digest* to reach our defined audience.

Inventors
DIGEST

For more information, see our website
or email us at info@inventorsdigest.com.



one; the one with fewer impressions would have a
much higher rate of engagement.

Reach is similar to impressions, but it consid-
ers just the number of users who saw a post. For
this reason, it will always be less than impressions,
as sometimes posts are seen multiple times by the
same user. Reach gives you a good idea of how
large your audience is.

For video content, including reels and Live
videos, plays is also an important metric to
consider. This number is similar to impressions but
tells you how many times a video has been played.
These three metrics matter because they provide a
solid picture of how often your content is seen by
Instagram users.

To take things a step further and look at not
just what content people are viewing but also how
they engage with it, consider content interactions,
which highlights the number of times someone
has engaged with a piece of content through likes,
comments, saves, shares and replies.

This metric is especially important because it
provides insight into what types of content your
audience likes. You can use these interactions to
inform your social strategy and get better results
as you market on Instagram.

With some careful attention to your social media
pages' analytics and insights, you can fine-tune
your strategy to ensure your efforts marketing your
invention online are a success. 📱

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.



HELLO INNOVATION

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

Simply put, we bring products to life.

HOW WE DO IT



Product Development



Industrial Design



Engineering & Prototyping



Manufacturing



Sourcing



Market Research



Crowdfunding
(Kickstarter)



Digital Advertising
& Marketing



Social Media
Marketing



Public Relations

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

For more information and to view samples of our work, enventyspartners.com



Easy on **the Eyes**

BROTHER-AND-SISTER DUO'S INVENTION PROMOTES BETTER VISION, RELAXATION IN A STRESSFUL SCREEN-TIME CULTURE

BY JEREMY LOSAW

OUR 21ST-CENTURY screen-time culture was contributing to Ali Habib's case of dry eye—and then, wet ears.

He consulted his sister Sharmin Habib, a practicing optometrist, about his mild condition in 2010. She encouraged him to use a warm, wet towel to treat it.

It was not a good experience.

"I remember ... trying to get this towel to the right temperature," he said. "I lay in my bed and put this towel over my eyes and water is dripping into my ears, and I was like, 'This is probably not something I am not going to repeat.'"

Ultimately, the Canadian brother-and-sister team developed a product that addressed dry eye as well as the daily stresses that constant computer and cellphone use can cause for our minds: Umay REST.

Cool in a.m., warm in p.m.

Ali's situation was hardly rare. Our constant exposure to PC and cellphone screens provides eyes and brains precious little time for recovery. This is exacerbated by the post-COVID, work-from-home world where many of us do not even

have a commute to wind down or step away from our devices.

As a result, we blink less than half the time in front of a screen as we do when not, our tears evaporate faster, and we do not get the micro and macro recovery times for our brains to effectively process information.

Umay REST is a thermal meditation device to help eyes and minds recover, and promote mindfulness. The device looks like a pair of eye goggles, but instead of lenses it has aluminum pads set inside a plastic frame to provide warmth, cool and vibration to the eyes.

The cooling mode is used in the morning to help the mind focus and wake up, as well as promote tear production. In the evening, it is used to warm and soothe tired eyes to stimulate sleepiness.

Battery powered, Umay REST can last from a few days to a week on a full charge. It has Bluetooth to connect to a smartphone app to update the device's firmware and change settings. The product can be paired with a subscription to a service called "The Exhale Collective," which offers webinars, wellness insights and a Slack (messaging program) community.

Breakthrough bonus

Ali and Sharmin began their invention by building a prototype of a device—made of 3D-printed parts—to warm eyes electronically, and without the use of warm water. While testing it, they had a breakthrough that enhanced the scope of what the device could be.

Ali Habib realized the product could become "an interesting mindful technique as well as addressing the issues with digital eye strain."

Umay REST is a thermal meditation device to help eyes and minds recover, and promote mindfulness.





“The prototype would quickly ramp up to set point temperature and then quickly shut off,” Ali said. “This was triggering the safety switch, and it would cool down and ramp up, cool down and ramp up.”

This reminded him of some elements of the cadence of mindfulness meditation and the body scanning technique. He realized the product could be something more: “This could be an interesting mindful technique as well as addressing the issues with digital eye strain.”

The breakthrough was coalesced with new research about reduced blinking and the negative effects for the eyes. He and Sharmin realized they had an idea for a great product to serve an important need.

With his engineering background, Ali was able to take the product to a point. But eventually, he needed some professional help. They hired a design firm to take the product from the prototypes they had and make it manufacturable.

During the design and engineering process, they had to make a key decision about whether to make the product a medical device for a clinical setting or keep it in the consumer world to service the wellness community. Because the path was much quicker for a consumer device—and they would not have to deal with the rigor of the medical device regulatory pathway—they opted for the consumer path.

Umay REST has an issued design patent with a suite of utility patents that are in process worldwide.

Big yes at CES

When Ali and Sharmin exhibited the device at the 2019 Consumer Electronics Show, they introduced Thermal Meditation™ and were given an innovation award in the Tech for a Better World category.

Sharmin remembers that as “a big moment for us at that time. It validated the problem and how we were delivering it in a way that was very novel and unique, and really merging the medical and wellness aspects into a very consumer-friendly platform.”

They continued developing the product and worked closely with clinics for feedback, as well as to provide additional exposure. In February 2021, they partnered with the Canadian government to help 500 work-from-home employees manage their transition and elevated levels of screen time with the product—with positive effects on their eye health and sleeping. The duo appeared on “Dragon’s Den,” the Canadian version of “Shark Tank,” in September 2022.

Twelve years after Ali’s bout of dry eye, Umay REST is finally on the market. The first manufactured units are shipping to early backers, and the team is taking new orders via their website. ☎

The breakthrough was inspired by new research about reduced blinking and its negative effects on the eyes.

Details: umay.rest

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



That's One **Smart Cat**

RUSSIAN IMMIGRANT'S LINE OF INTERACTIVE PUZZLE FEEDERS BEGAN WITH HIS PET'S PERSISTENCE **BY EDITH G. TOLCHIN**

Cat Amazing SLIDERS is an interactive puzzle feeder that brings the thrill of the hunt to indoor cats. The ever-changing treat maze has inner boxes that shift and slide on each level—changing the maze and moving the treats.

I'M A BONAFAIDE kitty lover. So, when I learned about Cat Amazing, I knew I had to interview its inventor, Andrey Grigoryev.

Edith G. Tolchin (EGT): Tell us about yourself and your background. Is this a team effort?

Andrey Grigoryev (AG): I was born in Russia and immigrated to the United States with my family when I was 8.

I went to a technical high school, with a concentration on visual arts. I graduated college

with a history degree, followed by a meandering career in the world of technology and marketing.

However, I've always been a tinkerer and wanted to build something of my own. So, when I came up with the idea for the Cat Amazing, I channeled that entrepreneurial inclination into making a business.

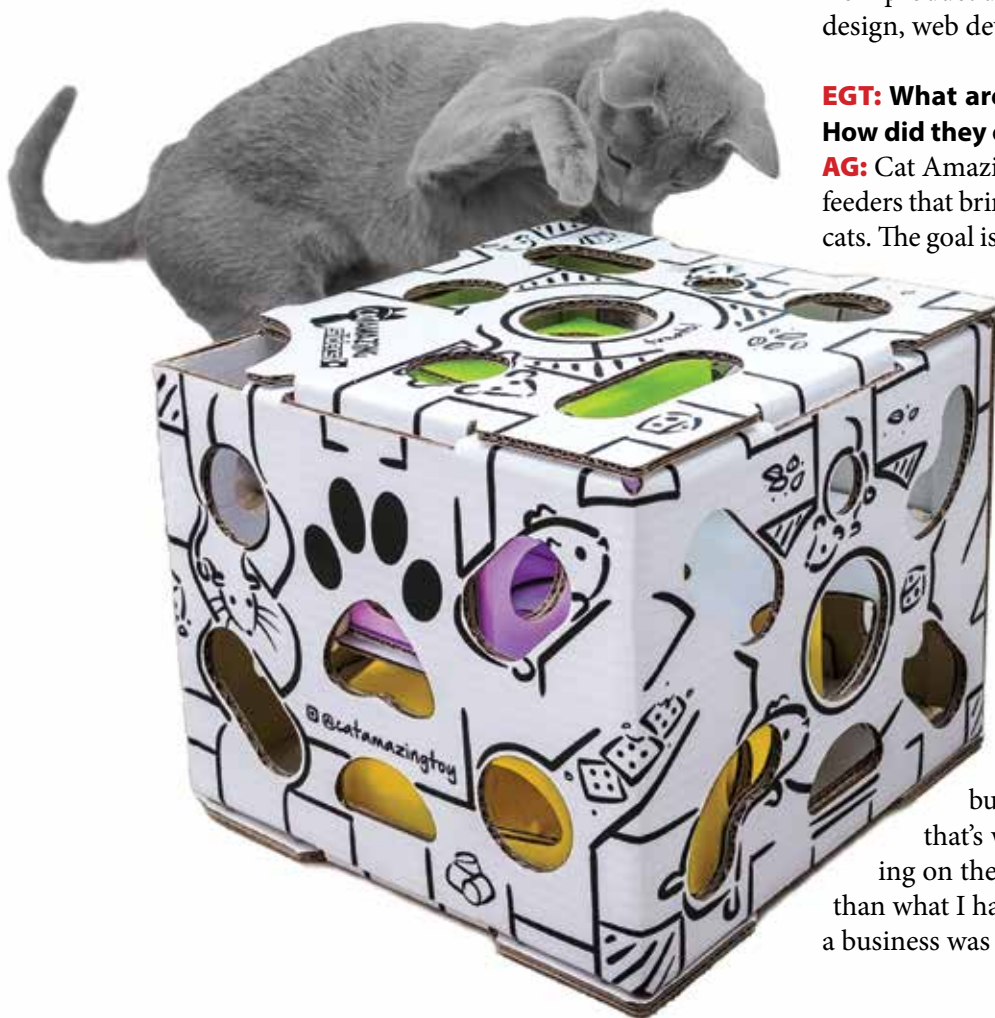
My wife was involved in the beginning, mostly with the ideation and patent processes. I'm still the only full-time employee, but I rely on a team of freelancers and contractors for everything from product development and CAD to graphic design, web development and marketing.

EGT: What are the Cat Amazing products? How did they come about?

AG: Cat Amazing is a line of interactive puzzle feeders that bring the thrill of the hunt to indoor cats. The goal is to provide enrichment—mental and physical—to indoor cats, while reducing the rate of eating for weight management and digestive health.

The original puzzle was actually invented by my first cat ... when he dropped a little red ball into a folding book-stand on the floor and worked to get it out.

I took an empty shipping box and a boxcutter and started making more elaborate mazes for him. He kept solving them, so I decided to just buy him something awesome—and that's when I realized there was nothing on the market that was more complex than what I had already made. So, the idea for a business was born!



“The original puzzle was actually invented by my first cat ... when he dropped a little red ball into a folding bookstand on the floor and worked to get it out.” —ANDREY GRIGORYEV

EGT: Of which materials are the products made? Where are you selling?

AG: The puzzles are made entirely of cardboard. They are sold primarily online (Amazon, our website, Chewy) and in some retail stores.

EGT: What is the retail pricing for the various items?

AG: The CLASSIC retails for \$16.95, the SLIDERS for \$28.95, and MEGA for \$36.95.

EGT: What was your experience with the patent process?

AG: My initial plan was to patent the game mechanics of the toy: adjustable difficulty based on certain parameters. I filed a provisional patent application and started the process of converting it to a utility patent.

I had done a light patent search prior, but it turned out that a similar game mechanic was already patented in another category. I considered adjusting the process but instead decided to abandon it because it was too time consuming. I decided to just focus on building a strong brand and loyal customer base and protect the product that way.

EGT: Have you had any problems or obstacles during product development?

AG: One of the key challenges in product development is making the product as small as possible, and fitting into certain form factors to reduce shipping costs—both ocean and domestic. Most shipping companies have categories for products based on dimensions, so fitting within smaller dimensions can put your products in a lower-cost category. And, of course, the smaller the product, the more you can fit into a container when shipping overseas.

These concerns were really emphasized by COVID, which presented a number of challenges—primarily in the form of increased shipping expense and delays. For example, the launch of the MEGA had to be delayed by nearly six months, first because of production delays and then because the shipping costs had grown astronomically. So, inventory sat for several months before shipping costs dropped into the profitable range.

EGT: Where are you manufacturing? If overseas, please share that experience.

AG: Currently, the products are manufactured in China. It was a challenge to find a manufacturer initially, and I had to go through several samples with a number of candidates before selecting the right one. This is a tedious process but very important.

In the end I found the right one, and I have been with that manufacturer for over 10 years. It is very important to find a manufacturer that is communicative and willing to collaborate on product development and manufacturing adjustment, and can help optimize the product for manufacture. They should be very proactive in offering advice and working toward solutions, not just taking what you show them and rushing to quote and move into production.

EGT: Any logo or trademark issues?

AG: The only issue I had with trademarking was that I initially got my logo and tag line trademarked together, so it was my logo with the words “Best Cat Toy—Ever!” written underneath.

This presented a problem when setting up my brand on Amazon. They required that



Andrey Grigoryev, shown with his current cat, Eli, says: “It is very important to find a manufacturer that is communicative and willing to collaborate on product development and manufacturing adjustment, and can help optimize the product for manufacture.”



The Cat Amazing CLASSIC has multiple difficulties so your kitty can learn and increase his and her hunting skills.

the brand name be exactly what's on the trademark. So, for several months until I received a separate trademark for the logo, my brand name on Amazon was "Cat Amazing Best Cat Toy—Ever!" A bit of a mouthful and an eyesore!

EGT: I understand you were on "Shark Tank." Tell us about it.

AG: Being invited on "Shark Tank" was both exhilarating and stressful. There was a great deal of preparation and all the nerves you can imagine during the event.

I received several offers from many of the "Sharks," which was very validating. Afterwards there was a lot of operational work to ensure the website was ready and there would be enough inventory to meet demand. There wasn't!

EGT: Did you get a deal?

AG: An agreement was made on-air with Lori Grenier for 22 percent for \$200,000—with the stipulation that 5 of those percent would go toward helping shelter cats, and I would match with 5 percent from my share. Subsequently, following due diligence review and negotiations, no formal deal was reached.


EGT: What advice do you have for inventors interested in developing a pet product?

AG: Do lots of testing. Create several prototypes and give them to pet owners to take for a spin. Initial reviews for any product launch are critically important, so be sure to address any issues before releasing the product for sale to customers. 🐾

Details: catamazing.com

Edith G Tolchin has written for *Inventors Digest* since 2000. She is an editor (opinionatededitor.com/testimonials), writer (edietolchin.com), and has specialized in China manufacturing since 1990 (egtglobaltrading.com).





The Opinionated Editor

Edith G. Tolchin

Editor • Copywriter • Journalist • Author

Helping you to say it **WRITE!**

www.opinionatededitor.com
editor@opinionatededitor.com
@QueenWrites
845-321-2362

Intellectual Property Education For All.

*Access and share these
FREE educational
resources to empower
IP creators today!*



THE MICHELSON INSTITUTE FOR
INTELLECTUAL PROPERTY

michelsonip.com

Of One Mind, and ONE OF A KIND

DR. GARY MICHELSON'S REFUSAL TO ACCEPT THE STATUS QUO IN SPINAL SURGERY FUELED HIS IMPACT ON INNOVATION, IP ACCESS **BY JUSTIN CHAPMAN**

THE INTELLECTUAL PROPERTY world knows of Dr. Gary K. Michelson, an acclaimed spinal surgeon and inventor. Spurred by the impact syringomyelia had on his grandmother, Dr. Michelson attended medical school and became one of the most prolific inventors of medical devices.

Few, however, know the “single-mindedness” that was required to drive the success of the 950 patents he holds, his deep understanding of the U.S. patent system, and how that fuels him to pay it forward by making IP education more accessible to all students.

“One cannot simply think outside of the box; one must deconstruct the box without the knowledge of being able to put it back together.”

—DR. GARY K. MICHELSON, 2022 IPOEF IP CHAMPION

“As a spinal surgeon, you can lift someone out of a wheelchair and help them return to their life; that’s a gift as a physician and something I wouldn’t give up,” Dr. Michelson said.

“Inventing something that helps thousands of people is a level of impact you cannot achieve as a physician.”

As reported in the October *Inventors Digest*, on December 7 the Intellectual Property Owners Education Foundation (IPOEF) will recognize Dr. Michelson as its 2022 IP Champion. The award is given to leaders who advocate for the value of IP to stimulate the progress of innovation.

Always single-minded

Dr. Michelson joins Dr. Lisa Cook, professor of economics and international relations at Michigan State University; Andrei Iancu, former director of the United States Patent and Trademark Office; and Joe Kiani, founder, chair, and CEO of Masimo, as IP Champions. The four are united by a belief in the value of IP, perseverance in their fields of work, and commitment to making IP more accessible.

Dr. Michelson understands the challenges inventors face and seeks to mitigate them for future generations. As a nonprofit organization, IPOEF is devoted to educational and charitable activities designed to teach about the value of IP rights and encourage innovation.

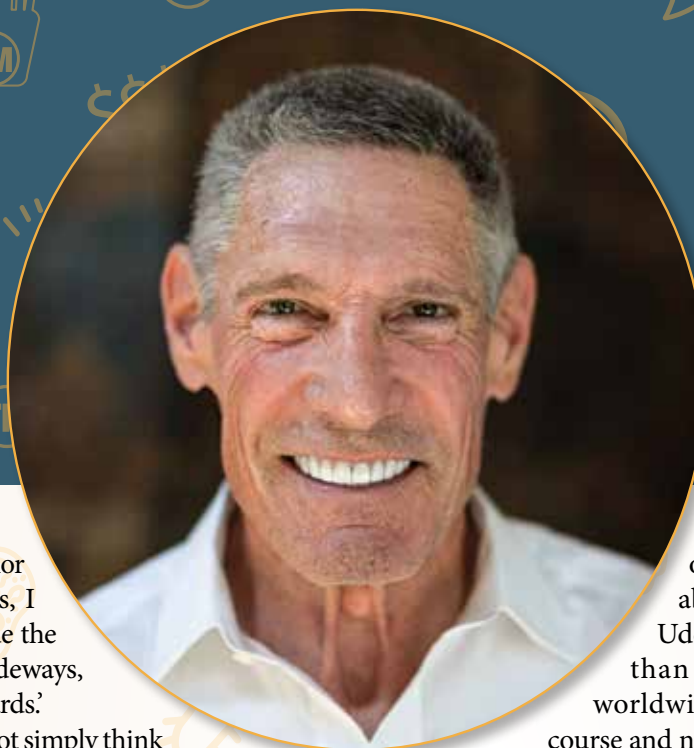
When Michelson was 17, he worked to put himself through medical school—determined to help people such as his grandmother. Post-graduation, one would not find a television set in Dr. Michelson’s home.

The reason? “Single-mindedness,” in the words of the inventor himself.

An inventor must be single-minded, he says. “Balance would not have worked for me.”

Ever determined to refute the status quo and reform the future of spinal surgery, he authored the draft of his first patent, rather than outsourcing it to a patent attorney. The desire to know a system so well that he could navigate it as an expert became a driving force in his life.

When a medical student asked him to describe an inventor, Dr. Michelson said: “To be a purposeful serial inventor, you need to give yourself permission to deconstruct things. You have to break stuff and say, ‘I’m not gonna accept the status



quo. No, I will color outside the lines, I will think outside the box, I'll think sideways, I'll think backwards."

"But one cannot simply think outside of the box; one must deconstruct the box without the knowledge of being able to put it back together."

A legacy of IP assistance

Dr. Michelson has long championed a strong patent system and the value of IP protections. He established the Michelson Institute for Intellectual Property (Michelson IP) at his education nonprofit the Michelson 20MM Foundation in 2016, providing free IP educational resources for inventors, entrepreneurs, and educators with a strong focus on underrepresented communities.

His work with Michelson IP will be honored during the 2022 IPOEF Awards as part of Dr. Michelson's commitment to IP advocacy. Michelson IP produces free, high-quality IP resources, including an interactive digital text and introductory college textbook, that make patents, copyright, and trademarks understandable for students and non-lawyers.

Michelson IP also developed an animated video series that breaks down the content into short, digestible videos, and a comprehensive

online course available globally on the Udemy platform. More than 20,000 students worldwide have taken the course and nearly 400 institutions have embedded Michelson IP's resources into their curricula.

Under Dr. Michelson's leadership, Michelson IP partnered with seven historically black colleges and universities in 2021 to launch the HBCU IP Futures Collaborative, providing the schools with IP curricula, resources and grants. This year, one HBCU student who received IP education through the collaborative went on to invent a fast food automation machine and file for a patent with the USPTO.

Ripple effects

Dr. Michelson's philanthropy has continued to spark invention in the fields of animal welfare, higher education and medical research.

"If you give up, you failed," Dr. Michelson said. "If you don't give up, it is an iterative process." 🔄

The Michelson Institute for Intellectual Property provides no cost IP educational resources to empower budding inventors and entrepreneurs. Michelson IP is an initiative of the Michelson 20MM Foundation, which focuses on a range of issues, including digital equity, smart justice, and open educational resources. It operates with support from Alya and Dr. Gary K. Michelson, members of The Giving Pledge. To access more resources, please visit MichelsonIP.com.

**THE MICHELSON INSTITUTE FOR
INTELLECTUAL PROPERTY**


**THE MICHELSON 20MM
FOUNDATION**



Gifts

That Celebrate Our Gifted Inventors

IN A WORLD where retail Goliaths often dominate market share (and infringement lawsuits) at the expense of mom-and-pop stores and independent inventors, it's important to remember that an idea starts in the mind of one person.

This is the foundation of the inventing process. And despite the mounting barriers independent inventors face,

Inventors Digest is committed to educating, supporting and encouraging them.

Our 2022 Inventors Supporting Inventors Holiday Gift Guide, compiled by regular contributor April Mitchell, is faithful to that mission. So pore over these innovative ideas and consider rewarding “the little guy” while surprising a loved one.



FYEWEAR

INTERCHANGEABLE EYEWEAR

fyewear.com

FYEWEAR are customizable, polarized sunglasses with patent-pending hinge technology to quickly swap temples and lens frames. Instead of buying entire pairs of sunglasses, you can now have high-quality shades and create a range of fresh looks for a fraction of the cost. Choose from a wide selection of temple sets. *Sunglasses and Temple Sets: \$59.99.*

Inventor: Vik Otra of FYEWEAR, Cumming, Georgia



Hand & Paw Bracelets

WEARABLE WORKS OF ART

handandpawproject.com

Hand & Paw jewelry is a daily reminder of our bond with our pets. These silicone, rubber strap, one-size-fits-most bracelets have a stainless-steel clasp and come in seven colors. A portion of the proceeds from every item in the Hand & Paw lineup is donated to support shelters, rescues and animal charities. \$42.99

Inventor: Deborah Groenheyde of The Hand & Paw Project, Victoria, British Columbia, Canada



Orange-Clove Ornament Kits

SPICE BALL POMANDERS

clarkridgecompany.com

Orange-Clove Ornament Kits fill your home with the warm, sweet scent of orange-clove spice ball pomanders. The kit includes everything you need to make four or more orange-clove spice ball pomander ornaments from your fresh fruits. Ages 8 and up. \$6.99

Inventor: Teresa Clark of ClarkRidge Co., Rogers, Arkansas





Happy Nappers

PLAY PILLOW & SLEEP SACK IN ONE
happynappers.com

Happy Nappers play pillows pop open to a soft sleeping bag with a simple pull 'n zip. They are go-anywhere friends for playtime, nap time or anytime. Choose from 10 fun characters and two sizes. Ages 3-7. \$49.99-\$69.99

Inventor: Bill Ward of TopShelf Design, Charleston, South Carolina

POMM® Kids

SAFETY WEARABLE
pommconnect.com

The POMM is a safety wearable band with a connected mobile app. The device allows families to stay connected anytime, anywhere. It has built in GPS, two-way communication with 4G LTE mobile minutes, a heart rate sensor, voice messaging and a one-touch check-in button. The child device communicates with the POMM Guardian App on your smart phone so you can see your child's precise location and receive alerts when he or she leaves the safety zones. Ages 3 and up. \$99

Inventor: Maryann Kilgallon of Pink Lotus Technologies, Inc., Orlando, Florida



DinoGlows

PLUSH, GLOW-IN-THE-DARK DINOSAURS
womplestudios.com

DinoGlows are stuffed plush dinosaurs that flip inside-out to reveal glow-in-the-dark fossil skeletons. DinoGlows come in a variety of dinosaur species, including Stegosaurus, Triceratops and Tyrannosaurus Rex. Ages 3 and up. \$34.99

Inventors: Erin McGarry and Alejandro Bras of Womple Studios, Oakland, California



Soothing Snuggler

CLINICALLY INSPIRED TEDDY BEAR

soothingsnuggler.com

Soothing Snuggler is a talking, teaching teddy bear that guides children to develop evidence-based, social-emotional skills through play. Each hand and foot has a sound mechanism that, when pressed, encourages children to engage in one of four skills: deep breathing, emotional expression, mindfulness and oxytocin-releasing hugs. \$39.99-\$45.99

Inventor: Dr. Erica Jex Gergely, LCP of Made Mindfully, PhD, Indianapolis



CHUGS

PORTABLE CHAIR ACCESSORY

heycheekybaby.com



Chair Hugs helps kids stay seated in their chair while at the table. Designed with folding walls to function like built-in chair arms, CHUGS is effective at keeping your toddler from sliding off the sides of the chair. They are a great option for dining out when a booster seat or highchair is not an option. Ages 18 months to 4 years. \$39.99

Inventor: Hayley Voorhees of Hey Cheeky Baby, Orion, Illinois

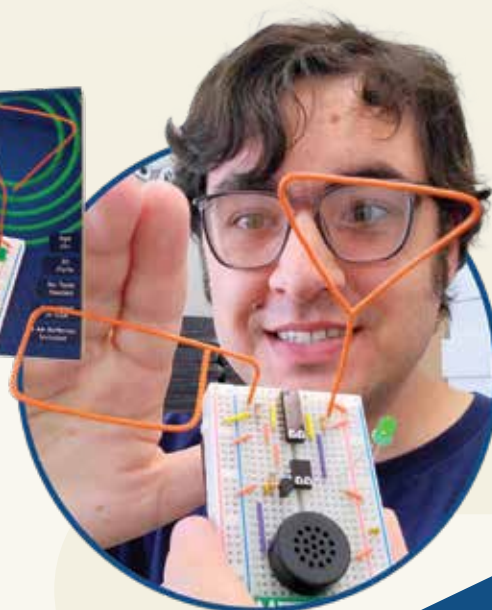
MicroKits

THERMIN ELECTRONIC KIT

microkits.net

The MicroKits Theremin Electronic Kit is a miniature version of the theremin, a musical instrument that is played by moving your hands through electric fields in the air near an antenna. By using carefully crafted code on a microprocessor, the theremin automatically calibrates to its environment and only requires a few electronic parts to work. Because of this, the theremin is offered as a DIY kit that anyone can build, without any special tools or electronics experience. Ages 10 and up. \$38.95

Inventor: David Levi of MicroKits, Charlottesville, Virginia



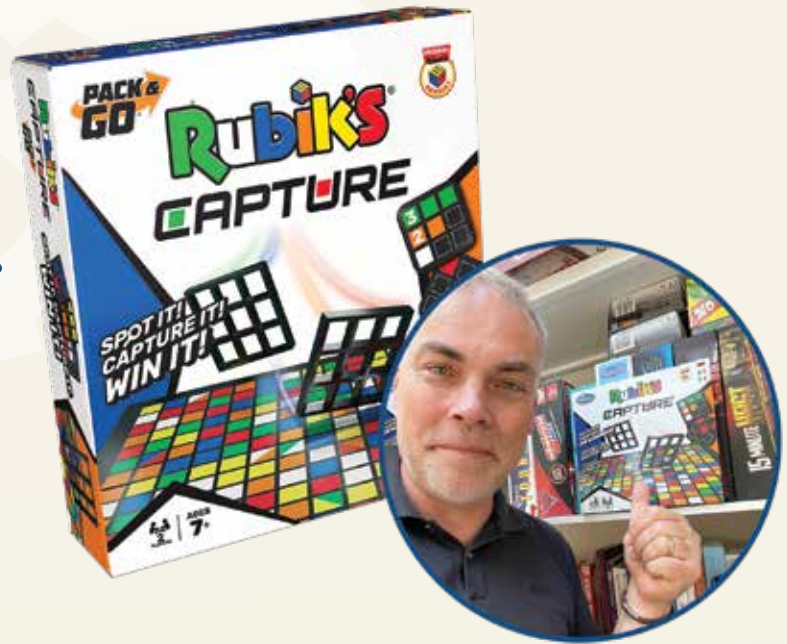
Rubik's Capture

STRATEGY BOARD GAME

amazon.com

Rubik's Capture is a high-intensity board game designed to get your brain and fingers racing at a fast pace. Search the colorful game board. Find the colors and patterns. Capture it with your grid to win. The Capture cards show colors and patterns. Flip the cards one at a time and then, it's a race to find the match on the gameboard. Ages 7 and up. \$19.99

Inventors: Richard Heayes of PlayLenz and Amanda Birkinshaw of Angelpie, both based in the UK



The Lunch Room Game

FAMILY-FRIENDLY PARTY GAME

eaptoyandgames.com

The Lunch Room Game is not your typical food fight! With six squishy tater tots to play for, you have to be quick so you won't lose your lunch. You must beat the lunchroom odds and its cast of characters to be the first player to fill your tray to win the game. Ages 8 and up. \$25

Inventor: Chrissy Fagerholt of EAP Toy and Games, Denver, Colorado



SKIP NN' HOLE

LAND AND WATER GAME SET

scorenn.com

SKIP NN' HOLE is a floating cornhole game set that combines the fun of stone skipping with the game play of cornhole. Additional game modes such as golf and Skee-Ball allow you to play on land and in the water. \$89.99

Inventor: Jaron Lodge of SCORE NN', Phoenix, Arizona



Hooks!

RING TOSS AND SHOT LADDER

craggygames.com

HOOKS! Ring Toss and Shot Ladder is a travel-friendly tabletop game. The goal is to be the first to land the ring on the hook and move the shot cup toward your opponent until it is completely off the ladder. Handcrafted in the USA. Ages 21 and up. \$99

Inventor: Kyle Czarnecki of Craggy Games, Virginia Beach, Virginia



Splashball Basketball

SPRINKLER AND HOOP ACCESSORY

splashballbasketball.com

Splashball is a water-spraying accessory that you connect to your garden hose and then your home basketball or poolside net. Each time a shot is made, a time-release valve sprays the play area for sprinkler fun. \$32.99

Inventor: Mark Williams of Splashball Basketball, Whitby, Ontario, Canada



Drink is the Answer

TRIVIA PARTY GAME

bubblegumstuff.com

Drink is the Answer is a trivia party game in which you pour answers, score points and drink shots. If you answer the quirky trivia questions wrong, you must drink a shot. But get them right and you can nominate another player to drink. Ages 21 and up. \$29

Inventors: Billy Langworthy, Deej Johnson and Lesley Singleton of Bubblegum Stuff, London



2022 USA JAMES DYSON AWARD

CINCINNATI GRADUATE WINS
FOR REPOSITIONABLE SCOLIOSIS BRACE



Sangyu Xi wanted to create something to help someone have “a different life.” Her invention includes a wear time monitor and access to an app to track wear time and healing.

Inspired by her mother and her own passion for design, a China native created the “Invisalign” of scoliosis braces that could improve the quality of life for millions of Americans.

University of Cincinnati graduate Sangyu Xi’s invention earned her the 2022 USA James Dyson Award. Her repositionable scoliosis brace, called Airy, can be worn comfortably and confidently by adolescent patients.

Airy can be set up at home with a unique installation guide. Adjustable to accommodate patient growth for up to three years, it includes a wear time monitor and access to an app to track wear time and healing.

Scoliosis is a lateral curvature in the spine that occurs most often before puberty, affecting 7 million Americans per year. Eighty-seven percent of teen scoliosis patients are girls. There have been limited advancements in scoliosis brace design since the late 1950s.

Sangyu, whose mother worked in medical device sales, always knew she wanted to use her design skills to create something that could help someone “have a different life.” During a discussion with a professor, she learned about the testing process for scoliosis in U.S. schools and decided to research further into the condition.

After discovering the limited advancements in scoliosis brace design, she began designs for a new kind of brace. Hers overcomes the typical scoliosis brace’s limitations of long-term fabrication, low patient compliance and non-recyclability; the off-the-shelf brace can be adjusted to match a patient’s future growth for up to three years.

The exterior color of Airy can also be modified or padding can be removed to make it translucent, allowing young patients to wear the brace confidently. After treatment, patients can donate the brace to third-world peers, or

the brace can be recycled up to 10 times because no glue is used in the manufacturing process.

The app also allows physicians to communicate with patients in real-time on any adjustments to treatment plans.

A prototype for Airy has been tested on four teen patients at Cincinnati Children's Hospital. Sangyu said feedback was extremely positive, with patients preferring Airy over their current braces.

She will receive \$6,600 to continue patient trials to continue to prototype Airy's design. Her plan is to use the James Dyson Award prize to bring on a machine learning engineer to further develop the Airy app, and an orthopaedic mentor to help bring Airy to market.

"Winning this national award really means something to the scoliosis patients who are trying to call to people, 'We want something new [that] we want to wear and that can help us fight against scoliosis,'" Sangyu said.

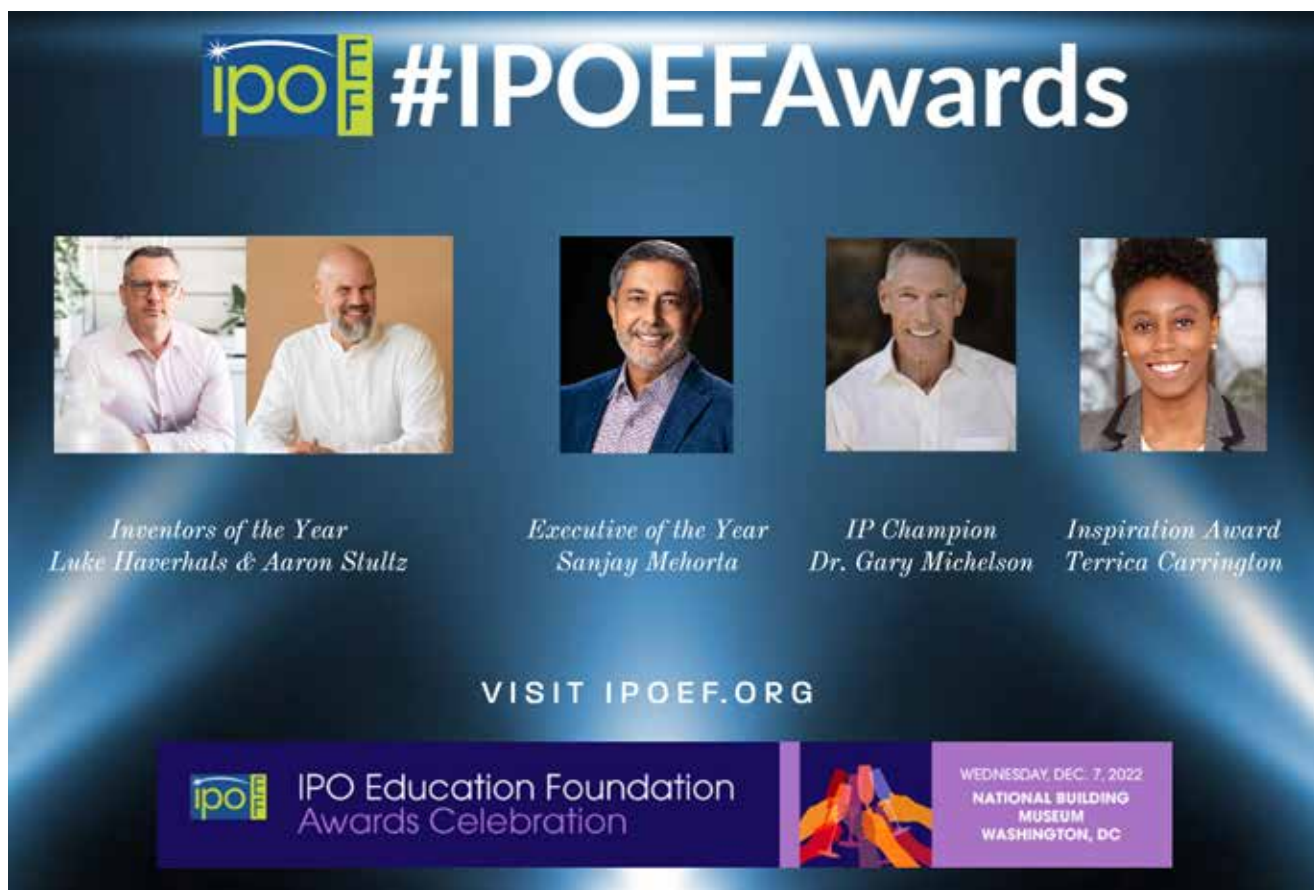
Born and raised in Chengdu in central China, she originally studied computer science at university. But after visiting the Museum of Modern Art in New York City, she switched to design.

Sangyu was drawn to the co-op program at the University of Cincinnati because of the opportunity to gain real-world experience. Airy was born during her senior year capstone project, with Professor Peter Chamberlain advising. 📍

RUNNERS-UP: Eunah Kim, Leandra Tejedor, Mengzhu Chen (Katie) and Saloni Bedi, recent graduates from the



Massachusetts Institute of Technology, developed Apt. It is the first standalone pregnancy test that can be used without sighted assistance. A mechanism translates the result into vibrations, which can be felt when pressing a button on the device.

Vishnu Jayaprakash, a recent graduate from the Massachusetts Institute of Technology's PhD program, created AgZen-Cloak—a spray system that uses plant-derived oils to cloak sprayed pesticide droplets, enhancing spray retention and enabling five-fold reductions to spray waste.




The banner features the IPOEF logo and the hashtag #IPOEFAwards at the top. Below are five portraits of award winners, each with their name and award title. At the bottom, it says 'VISIT IPOEF.ORG' and provides details about the awards celebration event.

ipoEF #IPOEFAwards

| | | | |
|---|---|--|---|
|  |  |  |  |
| <i>Inventors of the Year</i> Luke Haverhals & Aaron Stultz | <i>Executive of the Year</i> Sanjay Mehrotra | <i>IP Champion</i> Dr. Gary Michelson | <i>Inspiration Award</i> Terrica Carrington |

VISIT IPOEF.ORG



IPO Education Foundation
Awards Celebration



WEDNESDAY, DEC. 7, 2022
NATIONAL BUILDING
MUSEUM
WASHINGTON, DC

COLLEGIATE INVENTORS WINNERS

CLEMSON, MIT TEAMS ARE 2022 WINNERS FOR
BRAIN HEALTH DEVICE, PESTICIDE TECHNOLOGY

It is fitting that the National Inventors Hall of Fame's annual celebration of the best in innovative collegiate brain power has awarded a \$10,000 first prize to the inventors of a device that helps ensure brain health.

The four-student Clemson University team that invented CatheSure—which safely supports treatment of a condition in which fluid builds up within the brain's ventricles—is one of two first-place winners in the 2022 Collegiate Inventors Competition.

Kathleen Fallon, Karly Ripple, (above left to right) **Ally Reichart** and **Jordan Cole**, (at right left to right), assisted by adviser John DesJardins, invented the first device that noninvasively and wirelessly detects ventriculoperitoneal shunt failure. This problem occurs in connection with hydrocephalus, the name for the fluid buildup.

Hydrocephalus affects patients of all ages, including one in 500 children worldwide, and is typically treated with the ventriculoperitoneal shunt. But shunt malfunctions are frequent,

extremely difficult to detect, and life-threatening if not treated promptly.

Rapid, cost effective and easy to use, CatheSure is integrated with an existing shunt and lasts the lifetime of the shunt without requiring battery replacements or Wi-Fi access.

The undergraduate Clemson team was also named winner of the 2022 Arrow Electronics People's Choice Award (\$2,000 cash prize). Arrow Electronics is a sponsor of the competition, as is the United States Patent and Trademark Office. Winning teams also receive a USPTO Patent Acceleration Certificate.

Vishnu Jayaprakash (opposite page) of Massachusetts Institute of Technology was the graduate team winner. Advised by Kripa Varanasi, he created AgZen-

Cloak—technology that cloaks droplets of pesticide-laden water with an ultra-thin layer of biodegradable, food-safe, plant-derived oil to increase retention on plants.

Only 2 percent of sprayed pesticide reaches targeted plant surfaces because these surfaces



are water repellant, so pesticides are often oversprayed. AgZen-Cloak could help farmers use approximately 80 percent less spray and ensure better crop protection, yield and revenue while reducing pollution.

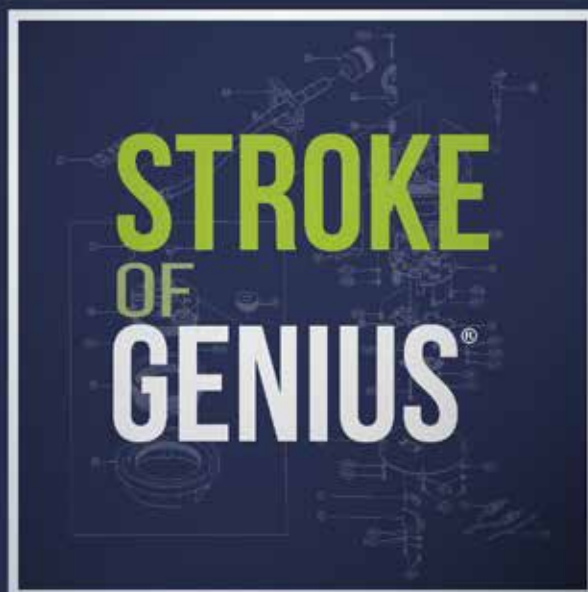
Runners-up (\$5,000 prize): Johns Hopkins University undergraduate team members **Hannah Yamagata**, **Jenlu Pagnotta** and **Delphine Tan** (adviser: Alissa Burkholder Murphy) created Dynamic Brace to improve clubfoot care. The soft, flexible, lightweight brace increases compliance, eliminating the need for a connecting bar and supporting mobility and comfort by allowing both feet to move independently.

In the graduate category, Dartmouth College student **Arthur Petusseau** (advisers:



Brian Pogue and Petr Bruza) was honored for the Hypoxia Imager for Surgery Guidance. The time-gated optical system, used in cancer surgeries, enables real-time imaging of hypoxia (lack of oxygen). Because tumors are hypoxic, imaging oxygen distribution can greatly enhance surgery outcomes. 🎧

Finalist teams (five undergraduate and five graduate), consisting of 25 students from 10 U.S. colleges and universities, presented their inventions to a panel of National Inventors Hall of Fame inductees and USPTO officials. For more information on the competition, see invent.org/collegiate-inventors.



Learn the importance of intellectual property and explore common myths and misconceptions surrounding IP protection.

AVAILABLE ON APPLE PODCASTS

Innovative Italy

TRAINING PROGRAMS IN SICILY AND CESENA UNDERSCORE
A WORLD-CLASS INVENTIVE CULTURE **BY JEREMY LOSAW**

“PICTURE IT. Sicily. 1922.”

It is the only even partial quote from any “Golden Girls” episode I can reliably remember—firmly planted in my brain as I set off on my latest international innovation training program to Italy.

One hundred years after the Sophia character’s story about a “young military officer stationed far from home looking for a friendly face and a glass of Chianti,” my colleagues Eric Gorman, Julia Jackson and I rolled up to a roadside cafe in Catania, Sicily, with a suitcase full of Post-it notes and electronics. We were searching for (and finding) a refreshing glass of Aperol Spritz and some talented folks with whom to work.

After a four-day program in Sicily and a 2-day program in Cesena, we walked away with some new friends, some great prototypes, and a new respect for an innovative culture forged from some of the greatest artists and engineers the world has known.

Left to right: Marco Spalletta, Eric Gorman, Julia Jackson, Jeremy Losaw, and Erica Todaro on the roof at Isola in Sicily. Spalletta and Todaro are part of the Isola team.



Innovation inspiration

Before our innovation training programs began, I had a chance to do some tourism to see some of the great Italian cities. I was fortunate to bring my mom, whose ancestors came from Italy.

Between glasses of wine and wonderful food, I was able to visit two sites that represent the pinnacle of Italian engineering and design: the Florence cathedral and the Ferrari museums in Modena and Mugello.

The dome of the duomo in Florence is an iconic postcard of a fabulous city but also an engineering marvel. The dome is the largest masonry vault in the world, reaching 116 meters into the Florence skyline. Brunelleschi designed it in the 15th century with a revolutionary double dome design that can stand without the typical support structure common in other churches of the time.

The result was brilliant and mesmerizing. My mother and I ascended all 463 steps to the top and were rewarded with a brilliant view of the city at sunset.

Of course, Ferrari is synonymous with Italy, high design and precision engineering. Enzo Ferrari used his passion for racing and high performance to create one of the world’s most iconic auto brands.

For someone like me, who loves Formula 1 racing and watched the era dominated by Michael Schumacher and the Scuderia, it was a wonderful experience to see both the iconic road cars as well as the all-conquering F1 cars of the late 1990s and early 2000s designed by Ferrari engineers.





After two days of design sprint training and a day and a half of intensive prototyping, we were surrounded by great ideas and prototypes.

Ecological eureka

Fully inspired by the great art, architecture and innovation from around Italy, it was time to get to work. Our program was again sponsored by the U.S. State Department, this time through a grant from the U.S. Consulate in Naples.

First on the agenda was a 4-day hackathon in Catania, Sicily, focused on the challenge question: “How might we use technology to help agricultural producers maximize their crop output while minimizing environmental impact?”

At the Isola co-working space, based at the beautiful Palazzo Biscari, we had the ideal venue for our 20 participants to tackle this challenge. After two days of design sprint training and a day and a half of intensive prototyping—including working with Particle IoT development boards—we were surrounded by great ideas and prototypes. The ideas included intelligent water collection, creative leasing of agricultural land, and smart compost collection.

Then it was off to our second program, a 2-day innovation training in Cesena—a sleepy city of about 100,000 people just a short train ride south from Bologna.

We held the training at the incubator, CesenaLab. Given that Italy is soccer mad, we

decided to give our 35 participants this challenge: “How might we enhance the experience of going to a football match sustainably?”

Of course, being good trainers, Eric, Julia and I had to do our research. We attended the Bologna FC-vs.-Fiorentina (Florence) match the weekend before to get immersed in the passion of football culture in Italy.

Interestingly, about half of the trainees were football fans and half of them were not, which made the solutions they came up with very diverse.

Ideas ranged from unique ways to make the local Cesena FC team stadium a community space to how to make the fan experience better for both home and visiting supporters. Hopefully, the American owners of Cesena FC will take notice.

Creativity endures

Italy was a bucket list experience for me. It was amazing to see the great art and architecture of the land of Michelangelo and Leonardo da Vinci, and even better to share it with my mom.

I was equally impressed by the great people of Catania and Cesena that we worked with, and their innovative spirit and passion to make Italy and the world a better place. ☺

Above left: Teams at CesenaLab use Design Sprint methodology to make the football experience better and more sustainable. Above right: The atmosphere at the Bologna FC match was super-charged.



Sniffing Out the Musk Machismo

HIS BRILLIANT STRATEGY ON PATENTS ENABLES HIM TO SAY THEY ARE 'FOR THE WEAK' **BY LOUIS CARBONNEAU**



IN AN INTERVIEW with Jay Leno, the ever-controversial Elon Musk dropped a bomb that surprised a lot of observers and created some turmoil in the IP community.

Mr. Musk is one of the best-known business leaders and influencers of this era, and his musings are dissected by tens of millions of people. He is also known for changing his tune from time to time, as we just saw with his reversal on the Twitter acquisition. In any event, I'd like to explore this and highlight my reasons for disagreeing with his statement: "Patents are for the weak."

The Tesla CEO (by the way, he is not a true co-founder of Tesla and was only able to gain this title as a result of a lawsuit with the actual founders of the company) has had an interesting history with patents.

In 2014, Tesla made its famous "All Our Patents Belong To You" pledge, whereby anyone is permitted to practice "in good faith" a set of Tesla's patents (note only those listed are subject to the pledge). There are obviously limitations to that pledge and one has to read the fine print to understand exactly what rights and obligations they are committing to, but the main point is elsewhere.

Tesla's long-term mission has never been to dominate the electric vehicle segment, although it was able to do so for quite a long time. The company has lost billions of dollars making and selling cars and has only recently turned an operating profit.

In the interim, this hasn't prevented Musk from becoming—for a while—the richest man in the world, very much the same way

BLACKBERRY'S ERRANT REVERSAL

After hastily announcing the sale of its vast patent portfolio several months ago to meet a self-imposed deadline, BlackBerry CEO John Chen then had to backtrack when it turned out some of the financing was not in place yet. It is a foregone conclusion that the deal with Catapult Innovation is likely not going to happen despite statements from the Canadian company that it is still confident it will.

In parallel, Chen recently announced that he is resurrecting the company's patent licensing business, "should that be necessary."

This was a mismanagement of the situation. This deal should never have been announced in the first place, as I already indicated in previous columns.

Meanwhile, 6 months of distractions have had disastrous impacts on BB's royalty licensing

results, which are down a staggering 77 percent from 2021 to 2022—and an even worse 94 percent decline if you compare the third quarter of 2021 to Q3 2022.

If I were a BlackBerry shareholder, I would candidly be asking for Chen's head. This was clearly a series of unforced errors.



Tesla has been sued over 30 times for patent infringement, including 20 times in the past three years.

Jeff Bezos has by building Amazon over two decades, most of which were in the red.

No, Musk's long-term vision has always been to enable and accelerate the building of a huge electric vehicle segment where he would then become the main supplier of batteries (by far the most expensive component) to all electric car manufacturers. He invested heavily in a U.S.-based gigafactory in Sparks, Nevada, that is now cranking out battery packs to whoever wants to buy them.

So, one has to see Tesla's patent pledge very much as a "gateway drug" used to hook the car industry into building more battery-based vehicles, while removing barriers to entry (i.e. patent royalties).

Tesla succeeds in cornering the market. This is a brilliant strategy where patents were used as a honeytrap rather than as a deterrent. And it seems to be working so far.

In the meantime, Musk can go around echoing the Silicon Valley machismo around patents by saying that they are for the weak. But he may have another reason to say so: Tesla has been sued over 30 times for patent infringement, including 20 times in the past three years.

So not everyone is using patents the same way Tesla does, it would appear. ☹

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.



PROGRESS ON THE HILL?

For those who enjoy tracking the number of patent-related bills that have been proposed in Congress in the past 10 years and never went anywhere, this one may sound familiar.

Yes, we have another attempt to reform a clearly broken aspect of the current patent system—i.e., the eligibility issue created by the 2014 Supreme Court ruling in *Alice* and worsened by years of inconsistent decisions from the United States Court of Appeals for the Federal Circuit. SCOTUS has had over 20 opportunities to revisit *Alice* and clarify the rules for patent matter eligibility, and has refused to do so every time.

Therefore, Sen. Thom Tillis (R-N.C.) recently introduced a bill, the "Patent Eligibility Restoration Act of 2022." It seeks to correct the most egregious abuses of the current legal framework, whereby thousands of validly issued patents have been declared invalid summarily by judges too often happy to check one case off their docket without having to actually consider the issue on the merits.

This issue has hit small inventors especially hard, and too many have never had their day in court as a result.

The proposed bill received an additional boost recently when Sen. Chris Coons (D-Del.), who is replacing retiring Sen. Patrick Leahy as the committee chair for all things IP, announced that he will co-sponsor the bill. This is a much-needed requirement for it to move forward in committee before a full Senate vote.

This bill, which would effectively overrule *Alice* (and previous SCOTUS cases such as *Mayo* and *Myriad*), has received the support of most industry pundits. They include former federal circuit Chief Judge Paul Michel and several past USPTO directors, a definite step in the right direction.

Surprisingly, the U.S. Inventors Association, which advocated hard for a congressional fix regarding clarifying patent eligibility, has come out against the bill for not going far enough. This puts it in the same corner—albeit on quite different grounds—as the big tech industry, which is quite content with the status quo. Odd bedfellows!

And strangely, probably not thrilled about being made irrelevant by Congress, the Supreme Court made a 180-degree turn and finally accepted in early October to hear a patent case (*Interactive Wearables v. Polar Electro*) that hinges on the same issue, something it had systematically refused to do so far.





Tough Questions in Prince Case

WARHOL'S USE OF GOLDSMITH PHOTOGRAPH AT CENTER OF 'MOST IMPORTANT FAIR USE CASE OF ALL TIME'

BY STEVE BRACHMANN AND EILEEN MCDERMOTT

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



THE UNITED STATES Supreme Court recently heard oral arguments in *The Andy Warhol Foundation v. Lynn Goldsmith*, a case asking SCOTUS to determine whether Warhol's unlicensed use of Goldsmith's photographs of pop superstar Prince was a fair use of that copyright-protected photo.

Many of the Supreme Court's questions focused on the scope of the use at issue in the case, as well as the extent of the new meaning or message that a purportedly derivative work must take on before it is considered transformative under Factor 1 of the four-factor fair use test.

The Andy Warhol Foundation (AWF) petitioned the court last December, asking it to review

a decision of the U.S. Court of Appeals for the Second Circuit that held Warhol's Prince Series did not constitute fair use of Lynn Goldsmith's photograph. The Second Circuit held in March 2021 that "the district court erred in its assessment and application of the fair-use factors and the works in question do not qualify as fair use."

The court further concluded that the Prince Series works were substantially similar to the Goldsmith Photograph "as a matter of law."

Fame 'not a ticket' to trample rights

In Goldsmith's latest brief to the Supreme Court, she argued that Warhol was not entitled to use her work without compensation merely because of his reputation.

"No one doubts Warhol's artistic innovations," said the brief. "But Warhol charged for his art and AWF will continue profiting, including by vigorously asserting Warhol's copyrights. Fame is not a ticket to trample other artists' copyrights."

AWF countered in its September 7 reply brief that "if Warhol's degree of creative transformation cannot even satisfy the first fair-use factor, little remains of the fair-use defense for artistic works." It added that Goldsmith's position "defies precedent and undercuts the First Amendment," and that "Goldsmith offers her own personal theory of fair use—a copyright-maximalist fantasy never before hinted at in this Court's precedent."

The U.S. government has been backing Goldsmith.

It argues that this particular use was not fair because it "served the same purpose—depicting Prince in an article about him published by a popular magazine—for which Goldsmith's photographs have frequently been used, including under the 1984 Vanity Fair license" and because "Petitioner's commercial licensing of the

THE FOUR FAIR USE FACTORS

- Purpose and character (of the use)
- Nature of the copyrighted work
- Amount and substantiality of the work to be used
- Effect (on the potential market for or value of the original work)

Orange Prince image to a popular magazine undermines Goldsmith's ability to license her photograph," among other arguments.

Massive scope

The October 12 oral argument was lively. The justices seemed engaged and interested in the subject matter.

Bruce Ewing of Dorsey & Whitney, who followed the arguments live, called the case "arguably the most important fair use case of all time," which is "likely to settle two of the most vexing copyright issues that have bedeviled courts all over the country for decades: To what extent can an author take a prior copyrighted work and incorporate elements of that prior work into a new work under the doctrine of fair use, and what makes that use fair?"

Ewing also said that if the Supreme Court decides in favor of AWF, "then the fair use defense is likely to be broadened significantly across a wide range of artistic categories and fact patterns."

Main arguments

Roman Martinez of Latham & Watkins argued on behalf of AWF. He primarily contended that the transformative meaning of Warhol's work, the dehumanization of celebrities in pop culture, "puts points on the board" for AWF on Factor 1 of the fair use test, which examines the purpose and character of the allegedly infringing use.

Martinez argued that Supreme Court precedent requires consideration of an allegedly new meaning or message on Factor 1 under *Campbell v. Acuff-Rose Music* (1994) and as re-affirmed by *Google v. Oracle America* (2021).

Lisa Blatt of Williams & Connolly, arguing for Goldsmith, directed the court to consider what she felt was the lack of an adequate justification by AWF to make use of Goldsmith's work in creating the Prince series.

Not only would a decision for AWF "drive a giant hole" through the derivative market for photographers, but Blatt argued it would turn Justice Joseph Story's seminal fair-use decision in *Folsom v. Marsh* (1841) on its head. Blatt also pointed to the wide scope of derivative works in the television sitcom industry that bear little resemblance to the original works, like the "All in the Family" spin-off "The Jeffersons." 🍷

Classifieds

COPYWRITING AND EDITING SERVICES

Words sell your invention. Let's get the text for your product's packaging and website perfect!

Contact Edith G. Tolchin:

(845) 321-2362

opinionatededitor.com/testimonials

editor@opinionatededitor.com

PATENT BROKERAGE SERVICES

IPOfferings is the one-stop patent broker for today's independent inventor. In addition to patent brokerage, IPOfferings provides patent valuation services, intellectual property consulting, and patent enforcement assistance for the inventor confronting patent infringement.

For more information about IPOfferings, visit www.IPOfferings.com or contact us at patents@IPOfferings.com.

PATENT SERVICES

Affordable patent services for independent inventors and small businesses.
Provisional applications from \$800.
Utility applications from \$2,500.
Free consultations and quotations.

Ted Masters & Associates, Inc.

5121 Spicewood Dr. • Charlotte, NC 28227

(704) 545-0037 (voice only) or

www.patentapplications.net

NEED A MENTOR?

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

www.inventor-mentor.com

Best wishes, Jack Lander

IoT Corner

Amazon recently announced the release of **AWS IoT FleetWise** to developers. The platform allows automakers, parts suppliers and others in the vehicle industry to push onboard sensor data to the cloud for analysis and AI.

Initially launched as AWS re:Invent in 2021, the service is designed to help improve fleet management, create a better environment inside the vehicle cabin, and improve vehicle performance.

Auto giant Hyundai and tiremaker Bridgestone are using the system, and many more seem likely to follow suit. —Jeremy Losaw



Wunderkinds

Atlanta Classic Academy students **Matthew Braun, Elizabeth Richter** and **Elizabeth Stinespring** won the Georgia Intellectual Property Alliance Young Inventor's Award for their invention, the Active Model Rocket Descent Controller.

The device is installed inside a model rocket that enables users to use a remote control to guide the rocket back toward the launch site as it descends under parachute. The three winners in the Georgia Science and Engineering Fair also won a team of lawyers to help their invention through the patent process.



What IS that?

We found the **Selfie Spoon**—a long extension that attaches to your cellphone—on technabob.com, with a headline: “This really needs to stop.” The posting was in 2015 and we can’t find one on Amazon, so maybe there’s hope.

\$3 million

The amount of money **Elon Musk** made after entering the fragrance business on October 12 and selling out of his Burnt Hair perfume in six days (30,000 bottles). Musk doesn’t have any respect for patents, but he knows how to make money.

WHAT DO YOU KNOW?

1 Which of the following is not a patented product in connection with preparing Thanksgiving turkey?

- A)** Turkey Baster **B)** Turkey Flipper
C) Turkey Tenderer **D)** Turkey Fryer

2 **True or false:** There is a design patent for something called the Turkey Fryer Wind Barrier.

3 When was stuffing invented as a regular part of the Thanksgiving meal?

- A)** 1830s **B)** 1860s **C)** 1890s **D)** 1930s

4 Which was invented first—the pop-up cooking timer (ideal for turkeys), or instant replay that was meant to enhance our enjoyment of football games on TV?

5 **True or false:** *Invention Sense* ranked the Pet Rock as the all-time biggest turkey of an invention.



ANSWERS: 1. C. 2. True. 3. A. Very little information is available, but a couple sources say the oldest written records date to 1836. 4. The pop-up timer, invented by George Kliever (not Eugene Beals, as erroneously reported by the *San Francisco Chronicle*), was patented in 1966—three years after instant replay was first shown during an Army-Navy game. 5. False. There is no such publication as *Invention Sense*.

DON'T MISS A SINGLE ISSUE!

Whether you just came up with a great idea or are trying to get your invention to market, ***Inventors Digest*** is for you. Each month we cover the topics that take the mystery out of the invention process. From ideation to prototyping, and patent claims to product licensing, you'll find articles that pertain to your situation. Plus, ***Inventors Digest*** features inventor pros and novices, covering their stories of success and disappointment. Fill out the subscription form below to join the inventor community.



Inventors DIGEST

ORDER ONLINE NOW
WWW.INVENTORSDIGEST.COM

TO PLACE NEW ORDERS OR RENEW SUBSCRIPTIONS BY
MAIL FILL OUT CARD, OR CALL 1-800-838-8808 OR EMAIL
US AT INFO@INVENTORSDIGEST.COM.

NAME

(please print)

ADDRESS

CITY/STATE/ZIP

E-MAIL

PHONE

referral code/referring subscriber (if applicable)

☐ 1 YEAR \$42.00 U.S. ☐ 2 YEARS \$78.00 U.S.

Make sure to enclose payment and send to
INVENTORS DIGEST 520 Elliot St., Suite 200
Charlotte, NC 28202



Start your patent
journey today!

Someone will cure diabetes.

Someone will build a smarter AI.

Someone will create a new energy solution.

Are you that someone?

— THE INVENTOR'S — PATENT ACADEMY

In this first-of-its-kind, free e-learning tool, you'll get to know the world of patenting and IP, hear from real inventors, prepare for the challenges you may face when patenting, and learn to protect your invention so you can bring it to life.

theinventorspatentacademy.com