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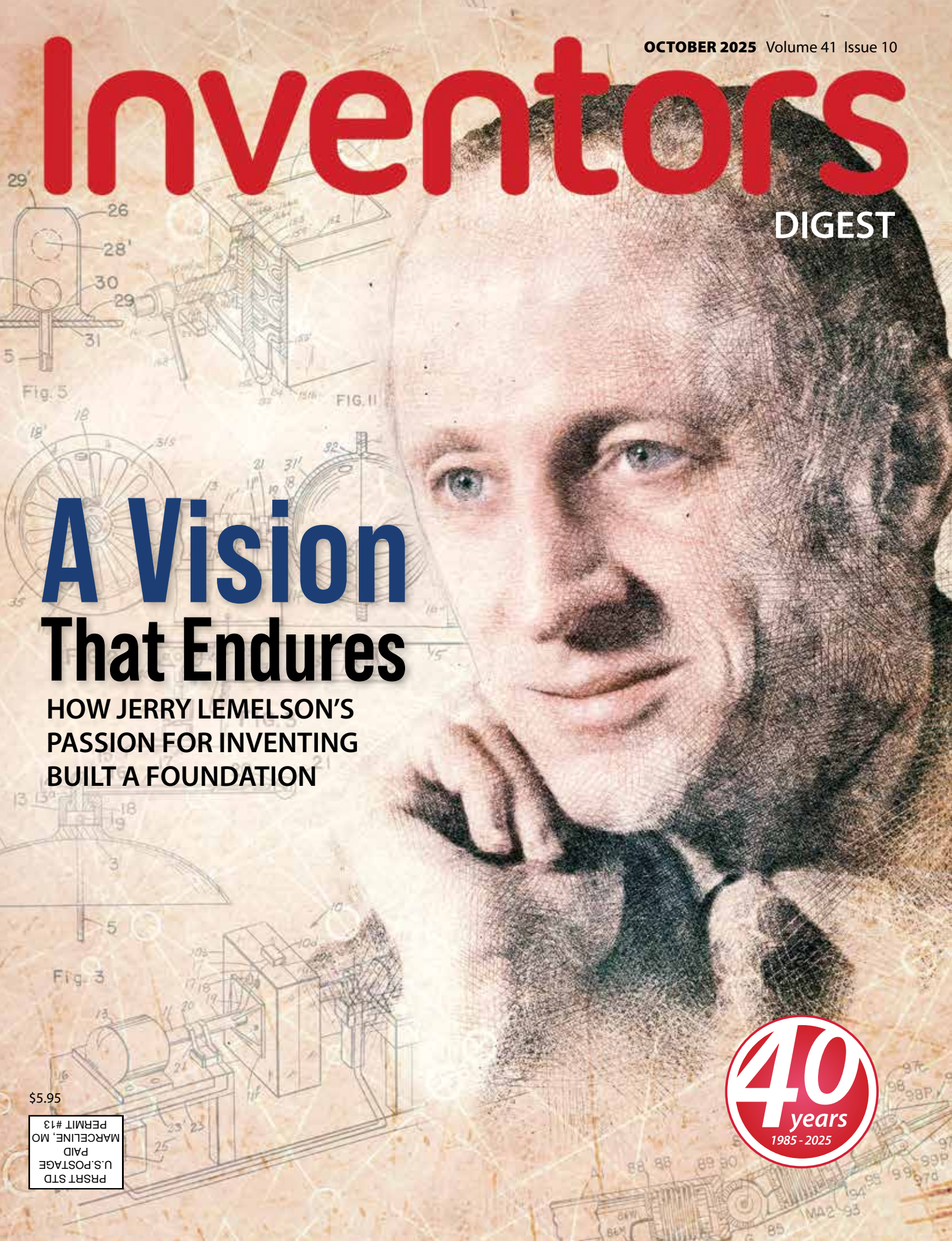
Inventors DIGEST



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IP Made Easy

New, free online tutorial from IPOEF demystifies IP in a relatable, storytelling way. **BY REID CREAGER**

The United States Patent and Trademark Office says a patent "grants the inventor the right to exclude others from making, using, offering for sale, or selling an invention."

IP Made Easy says a patent "is like a superhero cape for inventors ... a 'Do Not Steal My Genius' sign." It adds: "Think of getting a patent like trying to join an exclusive club. There are three bouncer requirements at the door [utility, novelty, non-obviousness], and your invention needs to claim all three to get in."

Which characterization would most people find more relatable?

One description provides the precise legal definition, while the other is designed to make the idea approachable for a general audience. That balance is the purpose and theme of a new, free, online tutorial produced by the Intellectual Property Owners Education Foundation.

The easily accessible IP Made Easy helps demystify the workings of patents, trademarks, copyrights and trade secrets. Its numerous short videos and anecdotal, real-world, identifiable examples encompassing those four IP tentpoles provide a motivational, fun journey designed to show why IP is not just something inventors need to learn—but something everyone should *want* to learn.

Christine Lawlor-King, a 20-year invention and IP educator who had a major role in creating IP Made Easy and narrates the course, has firsthand knowledge of the challenges of making IP relatable and digestible.

"As a teacher, I used to be afraid of teaching IP," she told *Inventors Digest*. "I did not understand it myself, so I did not teach it—even though I was teaching invention and entrepreneurship, two subjects that truly need IP at their core.

"Once I started learning more, I discovered that IP is fun, engaging and deeply relevant. I realized I was interacting with IP every day—and that my students would love it, too. And I was right!"

Making IP digestible

Intellectual property: 20 letters over two words—ponderous, lawyerly, intimidating for many.

IP Made Easy: just 10 letters in three words—simple, easily digestible, inviting.

Creations of the mind protected by law, IP can be misunderstood, even shunned because of the ways many people think about it and talk about it. Maybe that's a reason, according to a U.S. Intellectual Property Alliance survey, that 70 percent of Americans are unable to differentiate between the four types of IP.

But IP Made Easy shakes up the narrative.

Conventional, dry, mind-numbing legalese is replaced by stories about why Bruno Mars' publishing company sued Miley Cyrus for allegedly duplicating one of his songs to create her hit "Flowers." How the recipe for the Oreo cookie, Coca-Cola and KFC are all closely

> **"When I teach IP, I never hear the question, 'Why do we have to learn this?' Students see the value instantly."**
>
> —CHRISTINE LAWLOR-KING, INVENTION AND IP EDUCATOR

guarded trade secrets. How even the shape of a Coke bottle can be and is trademarked. How IP is an ongoing part of every day of our lives, from the moment we turn off our smartphone alarm.

As Lawlor-King tells viewers: "It's in your pantry, your Netflix queue and in your game day gear. It is also in the music you listen to."

IP Made Easy is designed to get you thinking more about what you can do with IP, not so much about what others are doing with it: "Knowledge is power, and you are on your way to having the tools to use, respect, teach and even create your own IP."

IP awareness also entails knowing what you can't do from an IP standpoint. Who would think, for example, that a model could be violating copyright law by posting photos of herself on social media? (If the photos were taken and owned by the paparazzi who shot them, she could be doing exactly that.)

"What are you posting on social media?" she asks, before adding another question that few of us consider: "Do you own it?"

The program begins on the webpage with a Start Learning tab, a click leading to a consolidated gateway to IP education via seven sections and 25 lessons—highlighted by an overview of IP and lessons on the four major IP components in a measured, organized path.

The patents section, comprised of short, conversational videos, discusses the three types of patents: utility, design and plant. Much is presented in an anecdotal context, even showing an actual patent and choosing a decidedly non-vanilla example: "an innovative way to scoop and store ice cream so that it will not run down the sides of a cone when it melts."

There is also information about resources for new inventors that include IP Buddy, IPOEF's recently launched, AI-powered digital assistant designed to help users understand and navigate IP.

Essential momentum

But IP Made Easy is more than a tutorial. It provides the "why" that goes with the "what." It's a mind-set, an energy that can inspire educators—who can pass that on to students.

"For more than 30 years, I've had the privilege of working with student inventors, and about a decade ago I launched the California Invention Convention," said its executive director, Brenda Payne. "Through all of that, I managed to remain blissfully unaware of many of the ins and outs of intellectual property. Recently, I decided it was time to change that and deepen my understanding.

"Whether you're mentoring young innovators, developing your own ideas, or just an invention enthusiast, IP Made Easy will, I'm sure, help you gain a better understanding of what IP is all about."

—BRENDA PAYNE, EXECUTIVE DIRECTOR OF THE CALIFORNIA INVENTION CONVENTION

"That's when I discovered IP Made Easy. It turned out to be exactly what I was looking for. The tutorial is engaging, easy to follow, and packed with the essentials of IP law, while also weaving in fascinating anecdotes that really bring the subject to life. Now, I can't help but notice every trademark, registered trademark, or copyright symbol I see!

"I highly recommend this resource to anyone curious about inventing. Whether you're mentoring young innovators, developing your own ideas, or just an invention enthusiast, IP Made Easy will, I'm sure, help you gain a better understanding of what IP is all about."

Payne's delayed IP journey underscores the fact that for intellectual property to become more widely understood and appreciated, educators at all levels will have to play a major role. One key attraction will be reinforcing the notion that IP protection and leverage can turn creativity into a lucrative career without mastering the traditional subjects taught in school.

Thomas Edison's mother took him out of school after one of his teachers referred to him as "addled." Leonardo da Vinci didn't have a formal education. Albert Einstein frequently struggled throughout his school years and was criticized for not paying attention. Our current world is full of similar examples of actors, musicians and others who built a livelihood on creativity.

IP provides another avenue of opportunity. It is "real-world knowledge, which makes students lean in," says Lawlor-King. "It brings out every student's gifts, because no matter who you are—an inventor, artist, poet, or athlete—you need to understand IP.

"The best part is, when I teach IP, I never hear the question, 'Why do we have to learn this?' Students see the value instantly."

IP Made Easy aims to not only add interest but emphasize the value of rightful protection of our works. Denise Heneggler, an invention and IP educator, said that "After teaching a unit on invention, one of my students came to school with new shoes. The students realized they looked like Crocs but they were not really Crocs. In fact, they were a knock-off sold at a popular retail store.

"The kids had lots of questions as to how that could happen. Some of the students were quite angry that something like this could happen. We looked up the original patent for Crocs, and then we compared that patent with the knock-off brand.

"This led to discussion about 'buyer beware' and why knock-off brands thrive. The students spent the rest of the school year bringing up examples of brands that 'copy' a more expensive brand."

IP Made Easy promotes more IP dialogue and understanding—which lead to more interest, more protection awareness and more information that is easy to grasp.

Details: www.ipoef.org/ip-made-easy

BACK TO SCHOOL?

IP MADE EASY

This August, as students sharpen pencils and minds, **IPO Education Foundation** is launching **IP Made Easy**, a tutorial that makes intellectual property exciting and accessible.

Know a teacher guiding young inventors, a parent of a curious creator, a college student with a side hustle, or a first-time entrepreneur with a big idea? This fun, engaging, and totally digestible tutorial is for them.

Packed with real life stories, surprising examples, and zero legal jargon, it's the perfect starting point for anyone new to intellectual property.

IP Made Easy, your IP tutorial to discover how intellectual property is everywhere and why it's worth protecting and teaching.

Check it out at IPOEF.org!

IPO EF Intellectual Property Owners Education Foundation

Young Girl's Bench A Hall-of-Fame Idea

The expression "sitting on the bench" elicits an image of being cast aside or left alone. "Grab some bench!" White Sox TV announcer Ken (Hawk) Harrelson used to derisively say to an opposing player who struck out.

A Las Vegas third-grader is changing that perception with her simple invention.

There are no patents, trademarks, copyrights or trade secrets involved with Phoenix Pyle's creation—only a creative spark of kindness meant to help kids who are lonely.

Woman's World recently told how Phoenix was in her elementary school bathroom when she heard a student crying in the bathroom because no one wanted to play with her. "I'll play with you," she told her—and during recess, she did.

She got to thinking there should be a designated place on the school playground where kids could go if they had no one to play with. When she got home, she worked on a "prototype" in the form of a drawing and called it the Buddy Bench.

Phoenix's mother took the idea to the school, only to learn that it would only approve the bench if made from durable materials and non-toxic paint—a project that would cost more than $2,500.

Phoenix started a GoFundMe campaign that was picking up momentum when a local small business owner, Luis Perez, volunteered to build the bench himself at no charge. A few weeks later, she and her mother were summoned to the school, where the colorful Buddy Bench was unveiled.

"It looks just like I drew it!" Phoenix said. She used the GoFundMe donations to pay for a bench at another elementary school. Similar campaigns have popped up, including one in England.

It's doubtful anyone will get rich from the Buddy Bench. That's not the point.

The point is that the reason for inventing is to make lives better—and that any creative innovation with kindness as its impetus should sit well with all of us.

—Reid
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Inventors DIGEST

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Everybody's Talking

CORRESPONDENCE

Squires appointment lauded

The Innovation Alliance applauds the Senate for voting to confirm John Squires as the next director of the USPTO. *(See Page 44)*

Mr. Squires exhibits a keen understanding of the critical role the patent system plays in the U.S. economy and recognizes the need for legislation to strengthen the system. He spoke strongly during his confirmation hearing about the importance of injunctive relief for patent holders who have had their intellectual property infringed and the need to reform patent eligibility laws to prevent the U.S. from falling behind China.

We look forward to working with Mr. Squires on these and other changes needed to improve our patent system and ensure it continues to serve as a driving force for our economy, supporting American innovation, job creation and global competitiveness."

—BRIAN POMPER, INNOVATION ALLIANCE EXECUTIVE DIRECTOR

Lee and Erin Hanson, IPOEF Inventors of the Year:

(September 2025)

Absolutely fabulous … what a feat and commitment to making an incredible difference.

Inventing is rigorous and not for the faint of heart. It was the tenacity—drive and vision—from Erin and Lee Hanson, and determination to making a difference.

My son, now 38, spent years on the rugby field in high school and college and after …. only to experience the bread head left over from on-the-field collisions. Thank you as a mom and an inventor with so much appreciation for your endurance and spirit. Truly inspirational!

—PATRICIA HERZOG-MESROBIAN

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LAWSUIT OVER 78 RPMS IS 86'D

Universal Music Group, Sony Music and other record labels privately settled a copyright lawsuit in mid-September against the nonprofit Internet Archive over its digitization and streaming of vintage records.

The San Francisco-based Internet Archive, a nonprofit, digitally archives websites, books, audio recordings and other materials. The Archive's "Great 78 Project" encourages donations of 78-rpm records so they can be digitized to "ensure the survival of these cultural materials for future generations," its website says. Introduced around 1910, 78s have not been made for over 60 years.

The labels' 2023 lawsuit charged the project was an "illegal record store" for 4,000-plus songs by musicians including Frank Sinatra, Ella Fitzgerald and Billie Holiday. The Archive said the project was protected by fair use.

BUT WAIT! THERE'S MORE!

Starting in October, look for bonus I*nventors Digest* content online—courtesy of our new **ID Extra** feature that celebrates our popular new, streamlined website.

Check the site often for regular posts that supplement the uniquely educational and entertaining magazine for independent inventors that celebrated its 40th anniversary in 2025.

Our first bonus add will be an excerpt from "The Inventor's Playbook: Turning Ideas Into Market Success" by Ben Greenberg, founder of Inventions Unlimited, in which he conversationally discusses important steps in the inventing process. Go to **inventorsdigest.com**.

INVENTING 101

Finding the Right Marketing Partner

BY DON DEBELAK

FINDING A marketing partner–another company already selling into your invention's target market—has the potential for very fast sales growth. But this will come with 30 percent to 50 percent of sales revenue going to the marketing partner, to cover sales and marketing costs and commission fees.

Selling through a marketing partner is often the best course for fast sales growth for inventors with high-margin products—where the product's wholesale sales price is at least three times the product's manufacturing costs.

Possible partners

Strive to work with companies in which the inventor can find someone "inside" who is willing to push management to carry your product. Ideally, this person is a regional manager or a marketing person with enough clout to advance the project.

Possible partners:

Companies with branded offerings. Products and services are branded when they are sold under a name the company promotes. Geek Squad sells branded computer repair services; Crank Brothers sells branded bike repair products to bike shops. Companies with branded products typically sell through established distribution channels, compete with many other companies, and have a somewhat steady stream of business.

Distributors. These people or companies often look for exclusive deals on "hot" products or services that have strong customer demand, which can boost all their products' sales.

Companies that market others' products. Many markets have one or two companies that market products from overseas manufacturers or small U.S. companies. They also make strong marketing partners.

Finding possible partners

This starts with the target customer. Anyone who is active with your target customer is a potential partner.

The best way to find these companies is by using trade magazines, which typically have directories where you can often get a list of manufacturers, manufacturer's representatives and distributors.

Some strategies for making a possible marketing partner receptive to your offer:

Look for new market trends, which open opportunities. Sometimes, companies don't know for sure what the fast-changing market wants and may use an inventor's product to better explore that market.

Look for possible gaps in the marketer's product line. Marketers can't afford these holes because many customers avoid having multiple sources of supply, which is expensive and complicated. Having an incomplete product line causes companies to dump one marketer in favor of another marketer with a complete line, to minimize hassles and expenses.

Examine the potential partner's marketing costs. Functions such as newsletters, service support or sponsorships of events are crucial for

VITAL VOCABULARY

MVP No, this is not a reference to the sports-originated term Most Valuable Player. We learned of this acronym from a panelist during the USPTO's annual Invention-Con event in September. It refers to a **Minimum Viable Product**—a prototype or early version of a product with just enough features to be usable to a customer as a tool for future development.

What a Patent Does and Does Not Do

WHEN INVENTOR School debuted in the April 2025 *Inventors Digest*, we addressed the ins and outs of the patent search. But let's not assume everyone knows exactly what a patent does, and what can be patented.

The preeminent source on the subject—the United States Patent and Trademark Office—says: "A U.S. patent gives you, the inventor, the right to 'exclude others from making, using, offering for sale, or selling' an invention or 'importing' it into the U.S."

Some may think that a patent provides the right to make, use, offer for sale, sell or import an invention. But you don't need a patent for any of that. A patent is all about excluding others from infringing on your idea, in which case you can consider legal action.

The three categories of patents are utility, design and plant. A utility patent is granted "for inventing a new or improved and useful process, machine, article of manufacture, or composition of matter."

Design and plant patents are basically self-explanatory, related to creations and innovations in those fields.

An invention must meet four conditions to be patented, per the USPTO:

- Able to be used (the invention must work and cannot just be a theory);
- A clear description of how to make and use the invention;
- New, or "novel" (something not done before);
- "Not obvious," as related to a change to something already invented.

Utility and plant patents have a term for up to 20 years from the date the first non-provisional application for patent is filed. A design patent is granted for a term of 15 years from the date of grant.

marketers but often barely break even in profitability for their companies. Small companies in particular, which may have trouble creating enough revenue to afford an effective marketing program, might add an inventor's product to build their revenue stream and help offset these fixed marketing costs.

Look for changes in top personnel. New management often goes out if its way to look at new ideas and concepts from inventor/entrepreneurs, in hopes they might have an idea that will sell. This situation is especially advantageous for inventors because they can often get right to the top management people in the company.

Don Debelak is the founder of One Stop Invention Shop, offering marketing and patenting assistance to inventors. He is also the author of several marketing books. Debelak can be reached at (612) 414-4118 or dondebelak@gmail.com. Don's Facebook page: facebook.com/don.debelak.5.

FREE ONLINE HELP

Not sure how to file patent-related documents? The USPTO will host a virtual training session October 21 from 2 to 3 p.m. ET to show how, in the DOCX word processing file format using the Patent Center.

You will hear from experts on the USPTO's eCommerce Modernization (eMod) team, who will provide demonstrations and answer questions. Instructions for joining the Webex training session will be provided via email to each registrant. Register through **uspto.gov/about-us/events/attend-docx-filing-training-215**.

GOOD TO KNOW

Effective September 11, 2025, identity verification became required for all USPTO Patent Center users to further improve intellectual property fraud protection.

Guest and unregistered users are no longer able to access the Patent Center. Customers can verify their identity through the ID.me verification platform, announced this year. Using ID.me allows users to obtain same-day verification and access to the Patent Center while simplifying the verification process and reducing wait time to access the center.

Users still have the option to mail a Patent Electronic System Verification form to verify their identity and gain access to Patent Center and accompanying features.

Aged Out at 30?

THE DVD—NOT LONG AGO THE LATEST IN SHINY ENTERTAINMENT CONVENIENCE—IS FIGURATIVELY AND LITERALLY COLLECTING DUST **BY REID CREAGER**

PHONOGRAPH RECORDS. Four-track and 8-track tapes. (Yes, the 4-track came first and was in many ways superior.) Cassettes. VHS tapes. CDs.

Now consider the fate of DVDs, seemingly playing out their short-lived acme in deference to the instant accessibility of streaming services—in a world where tech obsolescence travels with escalating speed.

Cord Cutters News dramatically reports how physical entertainment/information formats are losing their grip. It cited an annual study by Digital Entertainment Group revealing that sales of DVDs, Blu-rays and UHD Blu-rays dropped below $1 billion in the United States in 2024—a world away from the industry's summit of $16 billion-plus in 2005.

The 2024 year-over-year decline for a market that once defined how we watch movies and TV shows was 23.4 percent. Further, Netflix shuttered its DVD-by-mail service in 2023. Redbox, with its familiar DVD rental kiosks outside grocery and convenience stores, has shut down altogether. Digital Entertainment Group no longer bothers to track rental data.

DVD FIRSTS

- The world's first DVD player was the Toshiba SD-3000, launched in November 1996.
- The first movies released on DVD were "The Assassin," "Blade Runner," "Eraser" and "The Fugitive," which came out in Japan on December 20, 1996.

Collaborative triumph

While its demand and relevance weaken, the digital video disc (later called the digital versatile disc) is a reminder of the power of inventive collaboration.

Who invented the DVD? Nobody.

Not one person, anyway: The format was announced in 1995 as a joint effort by a group of companies primarily consisting of Sony, Panasonic, Philips and Toshiba. The first DVD players and discs were made available in November 1996 in Japan, March 1997 in the United States, 1998 in Europe and in 1999 in Australia.

The DVD made video formats more portable and capable of holding more data than its predecessor, the VHS tape. Although it's similar in appearance to CDs and the exact same size (120 millimeters), it has more storage than a CD—usually over 2 hours—and introduced features such as interactive menus, multiple audio tracks, subtitles, other extras, and the ability to be used for widescreen presentations and surround sound.

An August 8, 1996, technology column in the *Los Angeles Times* reflected the excitement over the new format while describing its then-space-age capabilities.

"The factory for digital videodiscs will open in January [1997], executives said. Matsushita Electrical Industrial Co., whose brand names include Panasonic, Technics, Quasar and National, said the plant will have about 50 workers initially, increasing to 120 within three years. DVDs are advanced compact discs with the capacity to hold 100 million phone listings or a full-length movie with better sound and video quality than videotape.

The 2024 year-over-year decline for a market that once defined how we watch movies and TV shows was 23.4 percent.

"Matsushita last month unveiled its first machines to play the new discs. The Japanese industrial giant said at that time that it would invest $30 million in new DVD facilities in California. DVD machines, which should be available next year for about $500, will be able to play both CDs and DVDs."

Fast-rising peak

When the first DVD specification was finalized in September 1996, the business world jumped into action. This included a slew of high-level marketing meetings with the major film studios, Wall Street companies, Hollywood celebrities and investment companies seeking to leverage optimum paydays.

The first DVD video came out in November 1996 in Japan and in the United States in 1997. Within 10 years, the market reached heights seemingly destined to remain for years—just as the 8-track market seemed invincible when it peaked in 1978.

An April 2005 *Deseret News* story reported that more than 400 million DVDs were shipped to retail stores during the first quarter of 2005, a 21 percent increase over the previous year.

The industry source? The same Digital Entertainment Group that is writing the DVD's obituary today.

"We are pleased to see new DVD owners so enthusiastic about their players and starting a DVD library," said DEG President Bob Chapek. At that point, there were over 43,000 DVD titles available; total number of units shipped since the launch of the format was more than 4.3 billion; and 73 million U.S. households had a DVD player, or nearly 80 percent.

"DVD is becoming ubiquitous," said DEG Vice President Jodi Sally. "We're seeing a shift from DVD players to DVD recorders now that those have now reached mass-market pricing. People are trading up and we're seeing huge growth."

Meanwhile, an internet site called YouTube—the first popular video streaming site—had launched on Valentine's Day that year.

INVENTOR ARCHIVES: OCTOBER

October 26, 1855: Charles Post, inventor of Post Cereals, was born in Springfield, Illinois.

According to the Post website, Post made his first batch of Postum, a cereal beverage, in a barn in Battle Creek, Michigan in 1895. He introduced Grape-Nuts—one of the first ready-to-eat, cold cereals—two years later.

From 1925 to 1929, Postum acquired more than a dozen companies and expanded its product line to more than 60 products. The name of the parent company was changed to General Foods Corp.

Few knew, but heartbreak was just around the bend for DVDs. Netflix began its video-on-demand service two years later.

Some are holding on

Will the DVD permanently lose its shine?

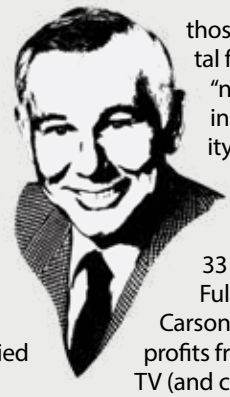
If phonograph records are any indicator, maybe not. Retro formats often have appeal with collectors who prefer a medium they can hold in their hands. A 2021 story in *Business Insider* noted that collectors say DVDs have better movie quality than streaming services; special features; a more nostalgic movie-watching experience, and greater assurance that you'll always have access to your favorite movies and shows. And there is the possibility that some DVDs could someday emerge as valuable collectibles.

The story mentioned Ben, who said he had 5,000 DVD titles. Vinny, from upstate New York, had 3,500 movie titles on his shelf in his home.

In the interest of keeping their collectibles safe, they did not provide their last name and chose to remain anonymous. Time will tell if DVDs end up the same way.

NOW STARRING: IP

Back to the Salt Mine: Heeere's Johnny!



It's incredible to think it has been 20 years since **Johnny Carson** died. But his iconic shows are still making news—more evidence that the King of Late Night was brilliantly savvy about protecting and monetizing his intellectual property for generations.

In late June, pop culture entertainment website Vulture reported that Shout!TV, the studio behind the free, ad-supported streaming (FAST) channel Johnny Carson TV, licensed 50 new episodes of "The Tonight Show" from Carson Entertainment Group that were to begin showing in July. Many of the episodes hadn't aired in decades.

Much more "new" Johnny appears to be coming to the public, sometime: The 50 latest available shows bring the licensed streaming archive to 471 episodes, according to many sources—just a speck among the 6,714 installments of the show from 1962 to 1992.

When Carson renegotiated his contract in 1972, it stipulated he would get ownership of the show and each episode during the next 20 years. He was so keenly aware of the value of that catalogue that it literally has been treated like buried treasure.

If you thought it crazy that questions in sealed envelopes for Carnac the Magnificent had "been kept in a mayonnaise jar on Funk and Wagnalls' porch since noon today," consider that about 20 years' worth of vintage Carson shows were long stored in a once-active salt mine, 650 feet underground in Hutchinson, Kansas, in a meticulously climate-controlled environment. Salt mines provide consistent temperature and humidity conditions.

The arduous process of transferring those analog originals into a digital format ensures that future "new" material may come in trickles. (The vast majority of shows before 1973 were lost long ago, the reels recorded over by NBC; one unauthorized post said only 33 survived.)

Fullerton, California-based Carson Entertainment not only profits from shows streamed on TV (and content such as "Best of the Tonight Show With Johnny Carson" on YouTube, along with many excerpts through the years), it offers episodes and clips for license. But they're not available to everyone; johnnycarson.com/clip-licensing says the content is "available for license to the entertainment and broadcast industry."

The site also stipulates: "All clip requests will be reviewed for approval. We reserve the right to deny a request due to the content of the footage requested or the context in which it will be used."—*Reid Creager*

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The Prototype Post

HOW TO SHARE YOUR WORKS IN PROGRESS AND BUILD EXCITEMENT, WITHOUT GIVING AWAY YOUR IDEA

BY ELIZABETH BREEDLOVE

WHETHER YOU are sketching a new gadget in the margins of a notebook, shaping a physical prototype in your garage or experimenting with materials at the kitchen table, the creative process is often messy, exciting and deeply personal.

Yet in today's connected age, many inventors no longer work in isolation. Social media platforms such as LinkedIn, Facebook, Instagram and TikTok offer opportunities to share progress, gather feedback and start building an audience long before your invention is finished.

The challenge: How do you bring others into the journey without revealing the details that make your idea unique?

After all, intellectual property concerns are real. Many inventors hesitate to post at all because they fear that once something is shared publicly, the idea becomes too vulnerable.

On the other hand, keeping everything behind closed doors can mean missing out on the momentum and excitement that comes from letting people follow along.

This is where the art of the prototype post comes in.

Done thoughtfully, sharing works in progress can help you attract interest, gather input and even prepare for future marketing—all without exposing the IP you need to protect.

Why share beforehand?

The idea of posting about something that isn't finished might feel odd.

Many of us were taught that you don't show the cake until it's baked, iced and ready for the table. But invention thrives on curiosity, and curiosity thrives on hints and glimpses.

When you post about your prototype, you are not only building interest in your invention but building trust in yourself as the inventor.

Audiences respond well to transparency. Even a partial look at your process can make people feel invested. By the time you are ready to launch, they will feel as though they have been on the journey with you.

There is also a practical advantage. Sharing progress lets you test the waters. Comments, questions and even the way people react with likes or shares can help you understand what parts of your invention capture attention.

Instead of expensive focus groups or surveys, you can use social platforms as an informal market test.

What to hold back

The balance between generating excitement and protecting your idea comes down to being selective.

Focus on the story of your work without exposing the most important details. That usually means highlighting the journey, not the blueprint.

For example, if you are working on a kitchen gadget, you might share a photo of the early prototypes sitting on a table with tools scattered around. The audience gets to see your commitment, resourcefulness and energy without getting a close-up of the mechanism that makes your gadget unique.

If you are developing a new type of fitness accessory, you might film a short clip of you testing durability by bending or pressing it, keeping the angle tight enough that viewers sense the strength without seeing the exact design.

The role of storytelling

The key is to think like a storyteller, not an engineer.

Storytelling is often what separates a forgettable post from one that lingers in someone's mind.

Audiences love hearing that your first version fell apart or that you tried 10 different materials before finding one that worked, because these details humanize you and invite others into the process—while keeping your intellectual property safe.

This doesn't mean writing long essays for every post. Instead, it means framing your updates around a narrative arc.

Begin with a problem, describe the challenge of finding a solution, and end with a small victory or a next step. Even a short caption can follow this pattern.

Protecting IP

Of course, none of this works if you are careless about what you share. While it's unlikely that someone scrolling through Instagram is going to patent your idea overnight, the risk is not zero.

That is why many inventors take simple precautions.

One common strategy is to submit a provisional patent application before posting anything publicly. This is less expensive than a full patent.

Although a PPA doesn't grant full protection, it establishes a filing date and can serve as a placeholder. Once you have that, you can feel more confident about sharing glimpses of your work.

Another approach is to be intentional about angles and framing in your photos or videos.

If the heart of your invention is a mechanism inside a product, don't post a video that shows it in action up close. Instead, post footage that focuses on your reaction or on the outer appearance. You can let people sense the excitement without giving them a free diagram.

It also helps to think of your posts as marketing, not documentation. The purpose of marketing is to build anticipation, not explain every detail. Keeping that mindset naturally avoids exposing too much.

Building momentum

Over time, a series of prototype posts can become a narrative thread. Followers begin to expect updates. They cheer for your small victories and feel invested in the outcome, which translates into momentum when you are ready to launch.

Imagine announcing that your product is now available for pre-order after months of sharing your journey. The audience that has watched you cut, glue, test and re-test will likely be eager to support you. They are not just buying a product; they are buying into a story they already know.

Focus on the story of your work without exposing the most important details. That usually means highlighting the journey, not the blueprint.

This is the hidden strength of prototype posting. It is not just about sharing progress. It is about building a bridge between invention and audience, a bridge that makes the eventual launch smoother and stronger.

As an inventor, you want to bring people into your process without handing them the blueprints. You want to spark curiosity without sparking imitation. By focusing on storytelling, protecting your intellectual property and tailoring your approach for each platform, you can strike that balance.

So the next time you are working late at night, hunched over a prototype that both frustrates and excites you, consider snapping a photo or filming a quick clip. Share the struggle, the small triumph, the simple joy of creation.

You never know who might be inspired, who might become a future customer, or who might simply cheer you on.

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.

Smart Fidgeting

FORMER EDUCATOR'S GROUP OF MULTISENSORY BOARD GAMES HELP CHALLENGED STUDENTS THRIVE **BY EDITH G. TOLCHIN**

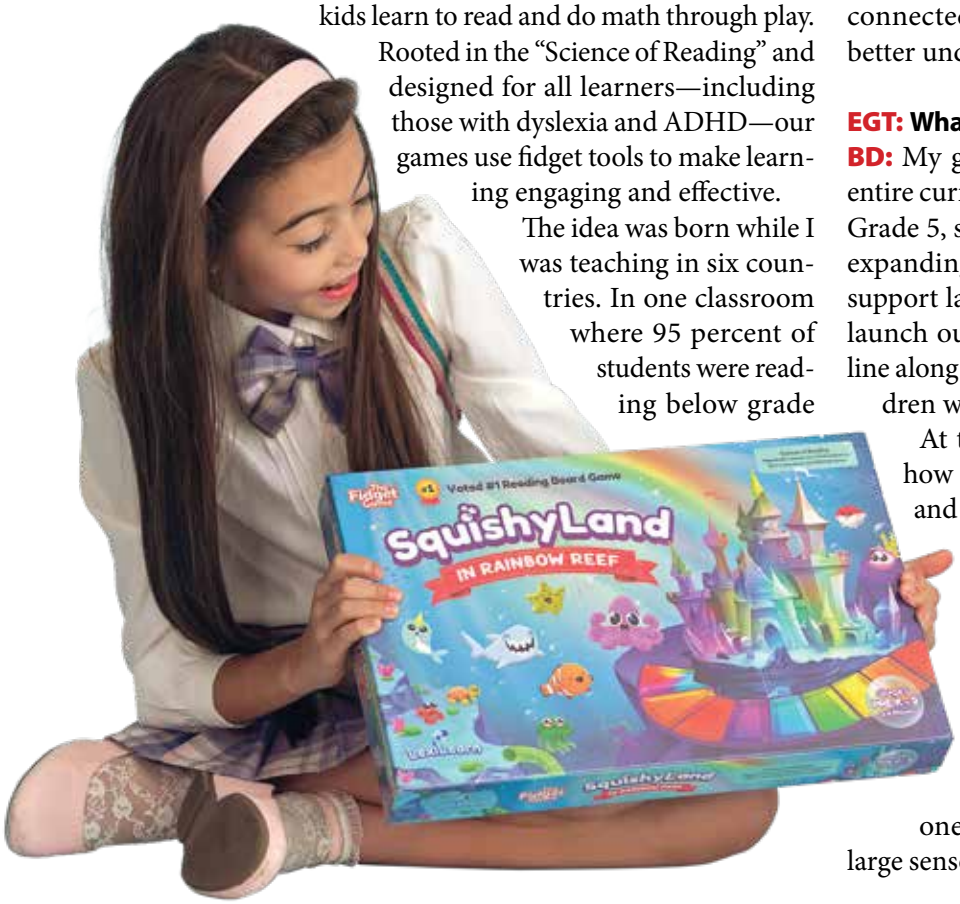
BRANDI DUGAL of Austin, Texas, is a former educator who has taught students from pre-K through sixth grade in six different countries. In one of her classrooms, she discovered that 90 percent of the students could not read "... because they hadn't been given the tools they needed to succeed."

This set her wheels spinning to invent The Fidget Game, now a group of colorful and research-backed fun games to help lagging students excel.

Edith G. Tolchin (EGT): What is The Fidget Game? How did this come about?

Brandi Dugal (BD): The Fidget Game creates screen-free, multisensory board games that help kids learn to read and do math through play. Rooted in the "Science of Reading" and designed for all learners—including those with dyslexia and ADHD—our games use fidget tools to make learning engaging and effective.

The idea was born while I was teaching in six countries. In one classroom where 95 percent of students were reading below grade level, I gamified reading—and by year's end, 90 percent were reading at or above grade level. That's when I knew: Play changes everything.



EGT: Tell us about yourself, your education, background.

BD: I'm originally from Canada and spent six years teaching in six different countries before founding The Fidget Game. I hold a Bachelor of Environmental Science degree from the University of Waterloo and a master's in education.

I live a quiet, minimalist life focused on creating screen-free, educational games that support all types of learners. My passion lies in helping kids succeed through play, while staying connected to schools and homeschoolers to better understand the challenges they face.

EGT: What is the larger goal with the games?

BD: My goal is simple: I want to gamify the entire curriculum for children in pre-K through Grade 5, starting with literacy and math. We're expanding into Spanish and French games to support language learners, and next year, we'll launch our SEL (Social-Emotional Learning) line along with a collection of resources for children with special needs.

At the heart of it all, we aim to change how children learn, how parents connect, and how educators heal the classroom—through meaningful play, empathy and research-backed tools designed for all types of learners.

EGT: Are the games patented? If so, please share your patenting experience.

BD: Yes, we have patents pending—one for our Popplers toddler mat with large sensory bubbles and pictures, and another

PHOTOS COURTESY OF THE FIDGET GAME

"In one classroom where 95 percent of students were reading below grade level, I gamified reading—and by year's end, 90 percent were reading at or above grade level." —BRANDI DUGAL

for being the first to feature letters and three-letter words on fidget mats.

We're still in the approval process but are confident after extensive work with our legal team.

EGT: How has your Reading Advisory Board assisted in creating the various games?

BD: We have an amazing reading advisory board, including experts like dyslexia specialist April McMurtrey, and Pamela Furr, founder of Puzzle Box Academy. After creating a game, we send it to them for feedback based on real use with students. Their insights have helped us refine and improve many of our games.

EGT: What are the outcomes of the Fidget Game in helping students? Are there specific games for, say, dyslexia, and other literacy challenges?

BD: The Fidget Game has helped thousands of kids—especially those with dyslexia, ADHD and other literacy challenges—to build reading skills through fun, multisensory play. Our games are rooted in the Science of Reading and support all types of learners.

Key titles include:

- Squishyland (pre-K to Grade 2)—teaches all foundational reading skills with leveled card packs.
- Word Pop (kindergarten to Grade 1)—builds letter sound blending and helps kids read three-letter words.
- Sight Words (kindergarten to Grade 2)—focuses on high-frequency words essential for reading fluency.
- Sneaky Elves (kindergarten to Grade 1)—helps early readers practice CVC words in a fun, fast-paced format.
- Unicorns vs. Dragons (pre-K to kindergarten)—teaches letter and number recognition through playful competition.

The Fidget Game creates screen-free, multisensory board games that help kids learn to read and do math through play.

EGT: How did you create the prototypes for each product? Was that a difficult process?

BD: Finding the right manufacturers is key. We're always customizing and experimenting with new materials to develop our products. There's a lot of trial and error—refining designs, testing functionality and making adjustments—but I wouldn't call it difficult. It's definitely a process but one that's incredibly rewarding when the final prototype comes together just right.

EGT: Have there been other challenges in the product development process?

BD: Product development has been one of the smoothest parts of our business, thanks to our amazing team of teachers and designers. The biggest challenge is having so many ideas and not always knowing what to prioritize first!

Inventory forecasting can also be tricky, but overall, it's a process we truly enjoy.

EGT: Please tell us about your experience on "Shark Tank" in 2023. Did you make a deal?

BD: My "Shark Tank" experience was incredible! I made a deal on air with Barbara Corcoran, and we had a meaningful conversation about our shared passion for literacy and supporting children with dyslexia.

Those conversations actually helped inspire the creation of LexiLearn—a gamified reading curriculum designed specifically for dyslexic learners. Ultimately, I chose not to move forward with the deal, as it wasn't the right fit for my business at the time. For now, I remain proudly self-funded.

EGT: What's the best thing that's happened since that experience?
BD: The growth has been amazing. We're now securing deals with bigger buyers and retailers, which is so exciting.

But the most meaningful part is still hearing from families and teachers. The stories of children learning to read, gaining confidence, and falling in love with learning—that's what makes it all worth it.

EGT: How many different games do you sell?
BD: We currently offer over 20 educational games for all grade levels from Pre-K to Grade 5, and we're excited to be launching five brand-new math games this year!

EGT: What guidance do you have for inventors who want to develop a children's learning toy?
BD: Follow your heart and intuition, but also test constantly with kids, parents and educators. Ask for honest, even harsh, feedback, and use it to perfect your product before going to market.

Personally, I welcome negative reviews. They help us see whether there's something we can improve. Most of the time it's valuable insight, and we act on it immediately. It's all part of creating something truly meaningful and effective for children.

Details: thefidgetgame.com

Edith G. Tolchin has written for *Inventors Digest* since 2000 (edietolchin.com/portfolio). She is the author of several books, including "Secrets of Successful Women Inventors" (https://a.co/d/fAGlvZJ) and "Secrets of Successful Inventing" (https://a.co/d/8dafJd6).

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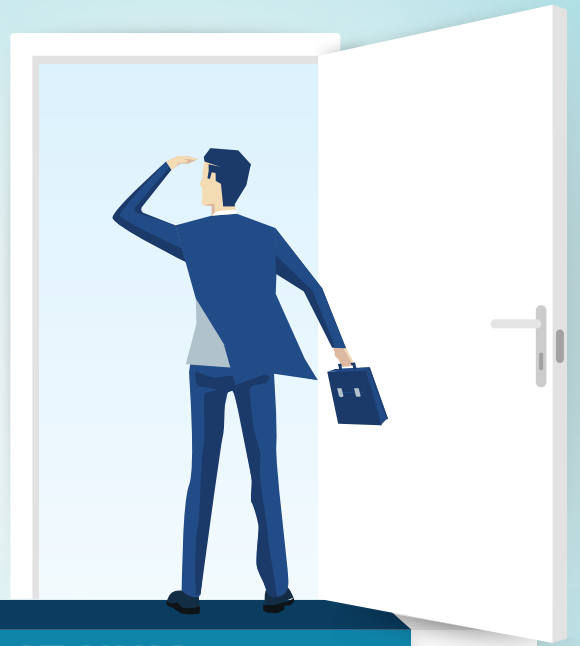

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See the Vision

SONS RECALL HOW JERRY LEMELSON'S PASSION FOR INVENTING AND INVENTOR RIGHTS BEGAT THE ICONIC, EVOLVING LEMELSON FOUNDATION

THE TOP-FLOOR ATTIC of Jerry and Dorothy Lemelson's New Jersey home was an idea factory, library and legal shop rolled into one.

It bulged with notebooks and legal pads filled with invention ideas, detailed drawings of toys, consumer and medical products, and complex systems. There were dozens of half-finished patent applications; magazines from the worlds of science, engineering, medicine and many other fields; and scores of legal briefs that no one in the Lemelson family but their author could begin to fathom.

The Lemelson boys, however, were not deterred by the evidence of their father's ever-active mind that lived on shelves, on their father's desk, and in boxes and closets on the attic floor.

They snuck up to the attic when their father was not home and explored.

Jerry Lemelson's lair was more than a place for him to create, and for his sons Eric and Rob to investigate. If some voice from on high were to order a mere mortal to locate the geographical origins of The Lemelson Foundation, Jerry Lemelson's legacy project, it would point to that sprawling attic room.

Jerry Lemelson and his wife, Dorothy, were loving parents who encouraged wonder and creativity in their sons Rob and Eric. The couple's complementary attributes and work ethic were instrumental in Jerry's historic success as an inventor, with more than 600 patents right up to his death in 1997.

A genius's lonely world

The life of an independent inventor is challenging and often lonely. Driven by some indescribable internal drive to create, one may toil for decades, often with little external validation.

Jerry Lemelson was in many ways no exception to this rule, at least until late in his life. His 600-plus patents spanned fields ranging from toys and other consumer products to medical devices, to information processing and automated manufacturing systems that in many cases were decades ahead of their time. Yet he was relatively little known outside of the U.S. Patent Office and certain inventor circles until the early 1990s, a few years before his death.

On the day he died, however, his patent portfolio ranked among the largest granted to any inventor in U.S. history.

Unlike other inventors such as Thomas Edison, who employed teams of engineers, designers and subject-matter experts, nearly all his inventions were the sole work product of one man. No one who knew him well would disagree that Jerry Lemelson lived to invent and create, a solo artist whose canvas was the world.

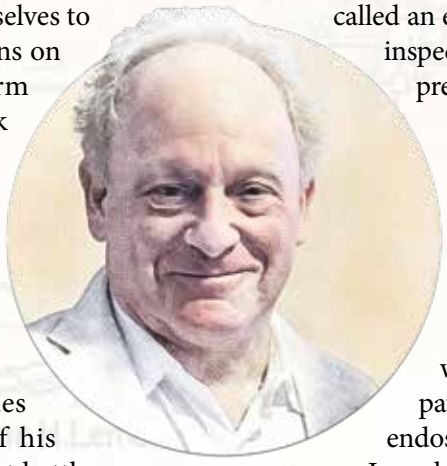
Ultimately, Lemelson's inventing acumen produced an automated warehouse system;

ALL PHOTOS COURTESY OF THE LEMELSON FOUNDATION UNLESS OTHERWISE NOTED


26
28'
30
29
31
5
Fig. 5
FIG. 11
FIG. 2
FIG. 3
15
16
17
18
19
3'
5
Fig. 3

an automated machine shop; a cassette drive mechanism that appeared in every Walkman; a talking thermometer for blind people; some of the basic components of the desktop computer, licensed to IBM; and much more.

He told an attorney friend that his most important invention was "machine vision," in the mid-1950s—a system in which a combination of computers, robotics and electro-optics allows assembly-line robots to assess an item and determine what work needs to be done to it before adjusting themselves to perform multiple operations on the item, and even perform quality control of the work when it's done.



"Problem solving was essential to his being."

—ERIC LEMELSON

While he spent decades focused on the details of his inventions and of the court battles he engaged in to protect his intellectual property, Lemelson also saw the big picture. He grew up during an era of U.S. economic dominance—a product of the outcome of World War II—and of significant U.S. government investments in science and technology to win the war, as well as in education; basic research that undergirds groundbreaking innovation; and a political climate that fostered broad prosperity and the cementing of a strong middle class.

Lemelson understood, from his education and life experiences, that long-term U.S. economic success in a rapidly changing global economy was never guaranteed—that, in fact, it could be fleeting if the country failed to understand, recognize and cultivate the reasons for its success.

Protect the patent system, support the development of the next generation of inventors and innovators, know what sets the country apart from its competitors, he thought, and we can remain a free, prosperous and stable nation for generations.

Throughout his career, Jerry Lemelson fought doggedly for his rights and those of other independent inventors. He served on a federal advisory committee on patent issues from 1976 to 1979, and continued to look for opportunities to advance the cause of inventors throughout his life.

Inventing to the end

Eric Lemelson, now a co-president and treasurer for the foundation, shared a story that illustrates his father's lifelong drive to invent.

His father was diagnosed with stomach cancer the year before his death in 1997. While he was being treated, "he had multiple endoscopies where the examining physician sticks a device called an endoscope down your throat to inspect the stomach. To me, it sounds pretty unpleasant!

"But he was fully present during the exam, paying careful attention to what the doctor was doing. After the scope was withdrawn, he continued processing his observations and thoughts—and within weeks or months, he filed a patent on an improvement to the endoscope."

Lemelson was granted more than 20 medical patents posthumously, based on work he did during his unsuccessful chemotherapy treatment. He worked "right up until two weeks before his death, when he could no longer sit up in bed," Eric said.

"Jerry's creative drive was all-consuming, because even at a moment when most folks would understandably choose to distract themselves, he was focused on problem solving.

"Problem solving was essential to his being."

The light was always on

Rob Lemelson, co-president and director of the foundation, has committed considerable time and energy to understanding and exploring the reasons for his father's inventive fire.

In his private and poignant documentary about their father, "Patent Man," he interviewed Jerry's middle brother, Howard, a New York-based engineer and entrepreneur. Howard described how they shared a small apartment in Manhattan when they were in graduate school.

"There were two beds and one night table. And on the night table, there was a lamp, a legal book, and a pen.

"Almost on the hour, Jerry would wake up, the light would go on, he would enter a new idea in the book, the light would go off, he'd go to sleep—and the next hour, the same thing.

"In the morning, I had six to eight inventions to witness, and I did (via his signature and date). This happened every night, seven nights a week, every week.

"Jerry had the most fertile mind of any man I ever knew. He could look at you, and he could see something that he'd like to invent that would make you better than you are."

Rob Lemelson explained how his father imagined things others never thought possible.

"Eric and I would always give him a hard time. I remember he told us in the early 1970s that 'I have this idea that satellites will gather data and send a signal so that you can navigate on the ground using a satellite miles overhead in space.' ... We said, 'Why would you work on something that we will never see in our lifetime?'

"Jerry had this ability to look out 30 to 40 years, and understand in detail what the world of technology would look like. It was remarkable."

Persistence and heartbreak

Though gifted with a keen vision to "see" and understand the march of technological development in his imagination and mind's eye, Lemelson was arguably born at the wrong time.

"My father grew up during the rise of corporate consolidation of the innovation process–when large corporations began to play a dominant role in inventing and patenting products and technology," Rob Lemelson said.

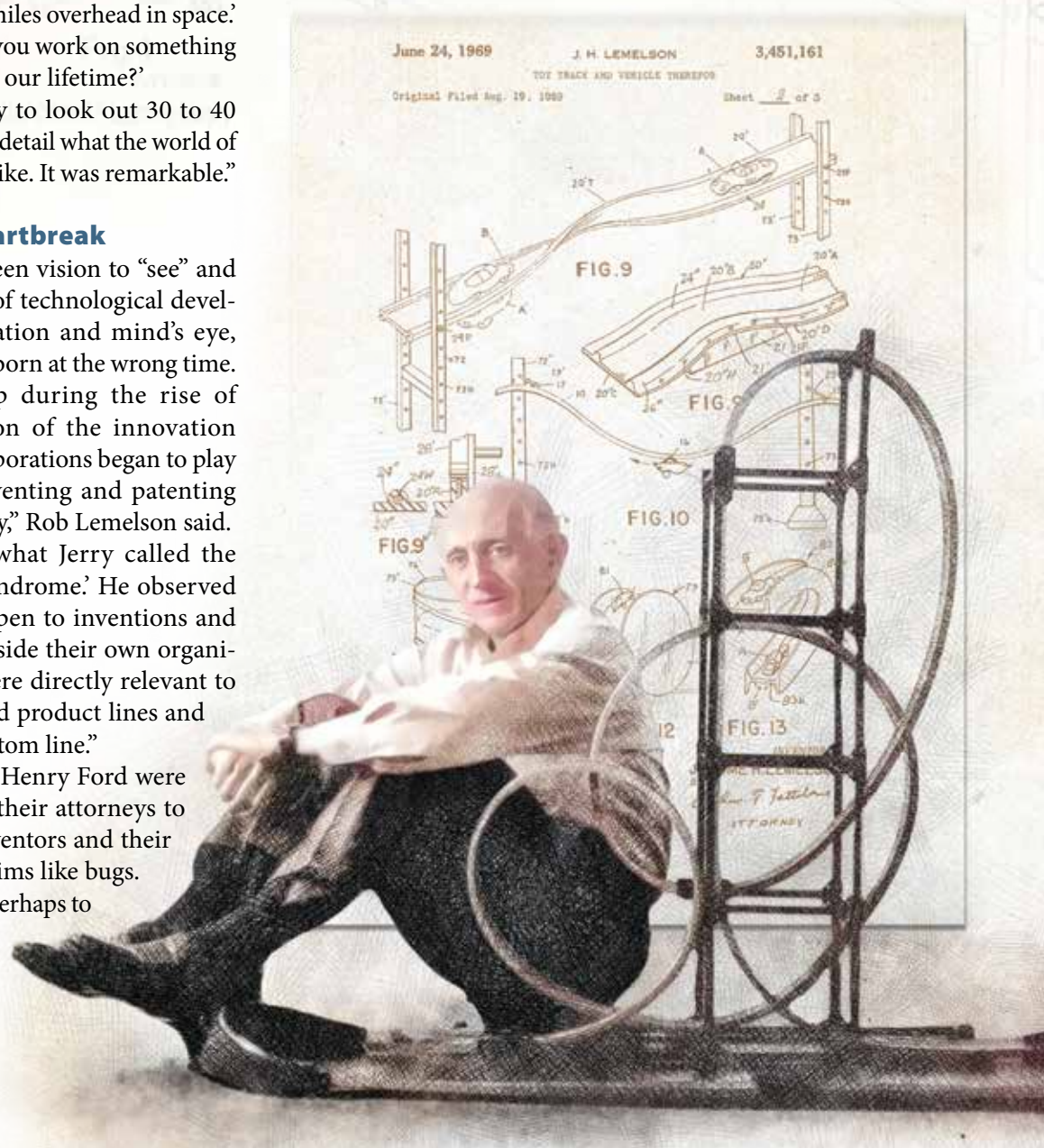
"Corporations had what Jerry called the 'Not-Invented-Here Syndrome.' He observed that they were rarely open to inventions and product ideas from outside their own organizations, even if they were directly relevant to their existing or planned product lines and could transform the bottom line."

Corporate titans like Henry Ford were infamous for ordering their attorneys to squash independent inventors and their intellectual property claims like bugs. That attitude persisted (perhaps to this day) and affected independent inventors like Lemelson.

As someone whose greatest gifts were in envisioning, designing and perfecting inventions, rather than in business formation and development, Lemelson struggled financially throughout much of his early and mid-career.

Though his early inventions included forays into complex technologies like automated manufacturing systems, he put considerable energy into inventing toys and games. He believed that toys were easier subjects to interest companies in licensing.

Ultimately, he spent more than 30 years in licensing efforts, which often frustrated him. In his view, corporations stole many of his ideas. Even today, his sons remember visits to toy stores with their father as he took pains to point out his creations on store shelves.



Jerry Lemelson's toy track patent approved in 1969 led to an infringement lawsuit against Mattel—and one of the biggest disappointments of his life.

However, when he sued to defend his patent rights, he found that the legal system was extremely difficult for independent inventors to navigate successfully.

In his view (and in the view of numerous other independent inventors), judges rarely had exposure to engineering, design and technology development, and the patent system represented a rather obscure corner of the legal world. Inventors like Lemelson experienced the hostility that many courtrooms exhibited toward inventors who fought to defend their intellectual property against corporate behemoths. Many, if not most, patent lawsuits by inventors were dismissed or thrown out of court during much of Lemelson's long career.

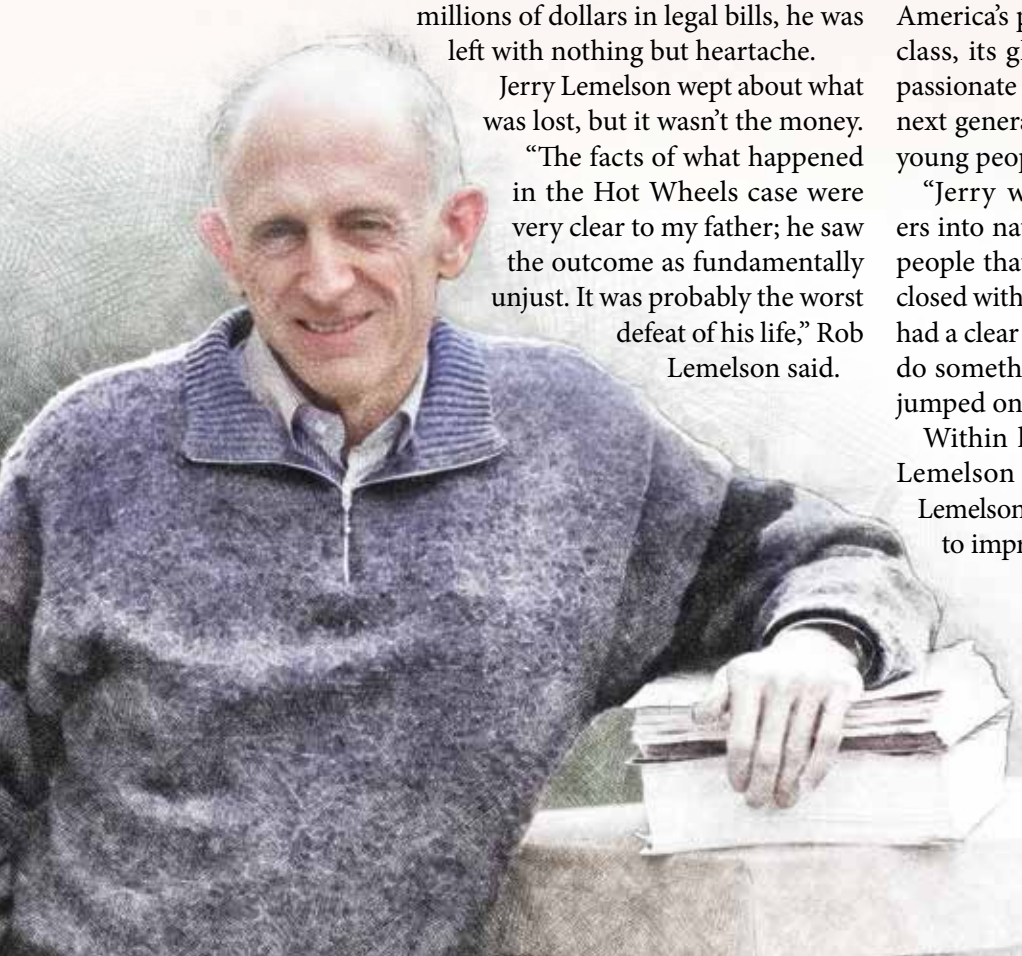
Lemelson's efforts to defend his work met with some success, But he often left court empty-handed.

His most devastating defeat came in 1992, when the United States Court of Appeals for the Federal Circuit overturned a 1989 ruling by a federal district court in Illinois that Mattel Inc. had infringed on his patented orange flexible track used for the Hot Wheels mini toy car line.

The jury had awarded Lemelson $72 million. Now, after years of courtroom struggles and millions of dollars in legal bills, he was left with nothing but heartache.

Jerry Lemelson wept about what was lost, but it wasn't the money.

"The facts of what happened in the Hot Wheels case were very clear to my father; he saw the outcome as fundamentally unjust. It was probably the worst defeat of his life," Rob Lemelson said.



A foundation born

Within a few years of his defeat in the Hot Wheels case, Lemelson's fortune began to turn in a major way.

In the early 1990s, he licensed a series of patents to numerous companies in Asia, and later the United States, but not before a series of major court battles.

Rob Lemelson remembered his father's determined pursuit of his goals.

"Jerry was a total fighter. He took on the largest corporations that had armies of attorneys and pretty brutal tactics. There was quite a concerted media campaign against my dad during that period, and so he was pretty upset."

In 1991, the brothers went for a walk in Los Angeles' Will Rogers State Park with their father.

"We sat on the grass and talked with Jerry about the arc of his career," Rob said. "I think we were trying to turn his attention away from the campaign against him by his opponents and the critical media that was the product of that effort. We explained that, after all these years of struggle, he now had the resources, the freedom of action and a vision to work towards.

"We reminded him how often he talked about how important inventors and innovators were to America's place in the world, its strong middle class, its global leadership. We discussed his passionate belief that we needed to cultivate the next generation of American inventors among young people.

"Jerry would say: 'We make sports players into national heroes. Why not show young people that inventors can be heroes, too?' We closed with a simple proposition—that he finally had a clear path to realize his vision, so why not do something with that? And he immediately jumped on it."

Within less than a year of that walk, Jerry Lemelson and his family had formed The Lemelson Foundation. Their founding mission: to improve lives through invention.

Initially, Jerry Lemelson chose as Lemelson Foundation partners several highly respected educational and cultural institutions. His overriding goal was to raise the profile of invention and innovation in America.

The Massachusetts Institute of Technology was one of the organization's first partners, with the Lemelson-MIT Program the first such effort. It began with the world's largest cash prize for an inventor, first awarded in 1995 and continuing until 2019, as well as a national Student Prize awarded to a top student inventor at the graduate school level.

Today, the program has transitioned to focus on invention education, based on the proposition that the ability to invent and innovate is innate to our species and can be cultivated, supported and taught.

The foundation also partnered with the Smithsonian Institution in its first few years of operation to establish and later endow the Lemelson Center for the Study of Invention and Innovation at the National Museum of American History. The extensive, interactive exhibits in the center inform and inspire young people and other museum visitors about the importance of innovation. The center also conducts research into the role of invention and inventors in the American economy, culture and history.

At the official dedication of the Lemelson Center in 1995, Jerry Lemelson said: "The spirit of invention is a basic ingredient in our democracy.

"In 1776, this nation invented itself. We discarded all the old models in favor of a dazzling experiment that forever changed what people mean when they say the word 'freedom.'

"So creative and far-sighted were the founders of this nation that our Constitution makes direct reference to stimulating invention and innovation."

Innovation in education

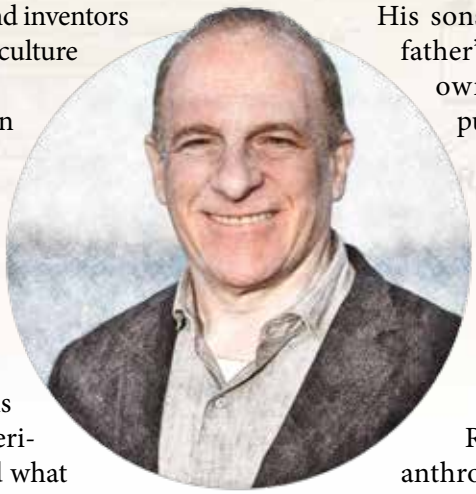
In 1995, Lemelson and his sons sought to create a new organization to explore the team-based approach to student inventing and enterprise development.

They were introduced to Phil Weilerstein, a young engineer at Hampshire College in Amherst, Massachusetts. Out of that meeting grew the National Collegiate Inventors and Innovators Alliance, which later became an independent nonprofit called VentureWell.

The organization's founding thesis is deceptively simple: support college students who form teams to produce product ideas that eventually become businesses and grow the economy. As these teams develop, students learn critical skillsets that 30 years ago were not taught in schools—including patenting, business development and marketing—and later, working with angel investors to get their ventures to scale and impact.

Weilerstein is still leading VentureWell, now a multi-million-dollar nongovernmental organization with hundreds of schools involved in its consortium, and hundreds of successful businesses that prove the real-world applicability that originated with Jerry Lemelson's ideas. Although Lemelson was a quintessential independent inventor, he understood that collaboration often plays an essential role in innovation.

His sons ultimately acquired their father's visionary bent with their own ambitious, big-picture pursuits.



"Jerry had this ability to look out 30 to 40 years. It was remarkable."

—ROB LEMELSON

Rob, a PhD, psychological anthropologist and documentary filmmaker, started The Foundation for Psychocultural Research in December 1999 to support and advance interdisciplinary research bridging anthropology, psychology, psychiatry and the neurosciences, and is a noted documentary filmmaker.

Eric, an environmental lawyer, started the Karuna Foundation in 2010 to contribute to the pressing issues of climate change mitigation and adaptation in the vulnerable Himalayan region. He is also a winegrower and winemaker in Oregon's Willamette Valley, and designs and develops energy-efficient buildings in the United States and abroad.

Opposite page: Jerry Lemelson, shown here in the 1990s, built the Lemelson Foundation with the support of his sons after a series of breakthroughs that included the licensing of a series of patents in Asia and later the United States.

Essential support

Dorothy Lemelson played a central role in her husband's career. "Jerry could not have succeeded without my mom," Eric Lemelson said.

Dorothy's income as a businesswoman allowed Lemelson to invent and create without having a regular income; her advice, perspective and faith in him were indispensable elements in his eventual success.

Rob Lemelson (left) and Arthur Molella—the latter the founding director of the Jerome and Dorothy Lemelson Center for the Study of Invention and Innovation at the Smithsonian's National Museum of American history—celebrate with Dorothy at the SparkLab and Places of Invention opening in 2015.

"Dolly" Lemelson was a gifted visionary in her own fields—design and aesthetics. Graduating from Parsons School of Design in Manhattan in 1947, she started an eponymous interior design firm.

In a short film Rob made about her life, she said with a laugh about her husband: "He was different from most people. ... Someone did say to me that if I stopped working, Jerry might get a job. So you can thank me for the fact that I continued to work."

After Jerry died, Dolly became president and chair of The Lemelson Foundation's Board of Directors. During her tenure as president, she and her sons broadened the focus of the foundation, expanding its impact regionally, nationally and globally. K-12 invention education became an important part of the foundation's grantmaking under her leadership. She died in 2021.

"She complemented Jerry very well," Eric said. "Jerry had his immense gifts and his creativity and his vision. Like many gifted scientists and engineers, however, he wasn't always good at reading others, and without my mom's advice, he might never have reached his full potential as an inventor.

"She worked as his partner without appearing on his business cards, but in terms of his interactions with others, her gifts shaped outcomes and influenced his perspective in the most important ways."

Future vision

The family believes that The Lemelson Foundation has progressed and grown in ways that Jerry would understand and appreciate.

Today, in addition to its legacy programs, The Lemelson Foundation has a strong focus on global impact through its programs in the developing world. In the early 2000s, the family chose to refocus a significant portion of the foundation's programming on inventing for sustainable development in the rapidly growing developing world.

The family's experiences, beliefs and values, including spending time in the developing

"When the foundation started, I think there was a lot of attention to highlighting inventor stories. Later we began to ask, 'OK, you've got a workable invention, now how do you take it to scale, to maximize its impact?'"

—ROB SCHNEIDER, EXECUTIVE DIRECTOR, THE LEMELSON FOUNDATION

world; a strong commitment to equity and social justice; a respect for people from all backgrounds, and an awareness of the increasing interconnectedness of the human family all drove the program's development.

Its initial programs funded grassroots inventor support in countries that included India, Kenya and Peru. Today, its International Entrepreneurship strategy supports the development of broader invention ecosystems. That strategy currently focuses on India and Kenya, supporting an approach to cultivate inventors who address social, economic and environmental challenges.

In 2023, the foundation announced a seven-year, $50 million Climate Action initiative to support innovative approaches for dealing with the climate crisis by decarbonizing the global economy.

Eric Lemelson said: "If my father was alive today, he would understand on a deep level the need for invention-based technologies to solve what is arguably the biggest global challenge our species has ever faced."

Aiming higher and farther

"It's been an evolution," said Rob Schneider, executive director of The Lemelson Foundation. "Thirty years ago, few people were really focused on the importance of invention.

"When the foundation started, I think there was a lot of attention to highlighting inventor stories. While stories are important, later we began to ask, 'OK, you've got a workable invention, now how do you take it to scale, to maximize its impact?'

"We need to be inventing for all sorts of problems. You maximize impact by changing the lives of hundreds of thousands and millions of people."

As these success stories develop, the foundation becomes emboldened to not only change outcomes but how we think about and prioritize inventing at a grassroots level.

"How do we change whole systems? I think we broadened our focus to think about what everybody can be—and that everybody should have equal opportunity to become inventive," Schneider said.

LEMELSON FOUNDATION PROGRAMS

LEMELSON-MIT

The Lemelson-MIT Program is a national leader in advancing invention education. LMIT has helped thousands of students and educators learn to invent and has recognized hundreds of collegiate and mid-career inventors.

inventEd

InventEd is a coalition that supports and advances invention education by uniting a network of educators, researchers, and other leaders to develop resources, raise awareness, and scale programming.

Engineering for One Planet

Engineering for One Planet aims to transform engineering education to ensure that all future engineers are equipped with the foundational skills to create and knowledge of social and environmental sustainability.

NSF

NSF-Lemelson Initiative on Environmental and Social Sustainability in Engineering Education aims to transform the engineer-formation system with the goal of fostering an innovative and inclusive engineering profession for the 21st century.

The Lemelson Foundation
improving lives through invention

The Lemelson Foundation Climate Action Initiative works to widen the pathways to solving the climate crisis.

Jerry Lemelson always challenged himself and others to expand our vision—what we can see now that can design a better future and solve important problems. Dorothy Lemelson summed up this perspective well in remarks to an audience of young people:

"I hope that each one of you is able to do something in your own life that will project something to somebody else, that is beyond what they can see." ◆

See more at www.lemelson.org.

PHOTOS COURTESY OF LEMELSON CENTER FOR THE STUDY OF INVENTION AND INNOVATION

BRIGHT IDEAS

OASSAY FlexFlow

3-IN-1 MODULAR PURIFIER BOTTLE

oassay.com

Billed as the first bottle of its kind in the world, OASSAY claims to provide virus-free purity for your drinking water with 99.999 percent virus, bacteria, parasites and microplastics removal.

Its 3-in-1 modular system enables you to boil, fetch and purify water anywhere.

The bottle's three modes—Minimalist, Sports and Camping—adapt to various situations. Each stage works independently for maximum filtration, delivering cleaner, fresher water with every sip.

One bottle with cartridge included, plus an extra cartridge and titanium cup, will retail for $154. It ships to crowdfunding backers in October.

VersaCarve

ALL-IN-ONE MICRO WORKSHOP FOR MAKERS

versacarve.com

Modular, wireless, compact and versatile, VersaCurve provides the power of a soldering iron or rotary tool in a compact setup, with stability and precision.

Use it as a tool or portable table saw, carve delicate patterns, or sand intricate edges. Work with wood, metal, glass, fabric, acrylic and foam. You can transform VersaCarve into a drill press or insert press with a click.

Every piece fits into a clean, labelled storage system that travels with you.

Both the VersaCarve SolderPro and PowerGrind will retail for $99, with shipping to crowdfunding backers in December.

Trio 3 and Trio 3 Pro

2 ATTACHABLE, HIGH-RESOLUTION LAPTOP PC SCREENS

mobilepixels.us

Trio 3 enables you to triple your laptop workspace area via attachable screens on the left and right while maintaining portability. The Pro model has better brightness and resolution.

Connect two extra screens with a single cable. (Some laptops may require two cables because of power limitations.) The screens are compatible with all M Series Macs and Windows.

Attach Trio 3.0 with optional, computer-safe magnets or the built-in kickstand. Easily extend, rotate and fully collapse the screens for a sleek, professional look.

Specs include a 14-inch screen with a weight of 4.3 lbs.

Trio 3 will retail for $500, the Trio 3 Pro for $575, with shipping to crowdfunding backers set for October.

"I never did anything by accident, nor did any of my inventions come by accident. They came by work."

—THOMAS EDISON

Lava Studio

TOUCHSCREEN AMPLIFIER

lavamusic.com

Promoting itself as the "world's most advanced amp" and "a home studio all in one," Lava Studio has a built-in, touchscreen tablet instead of tactile knobs. It offers modeling, recording and learning platforms in one compact combination, as well as a looper, multi-track Digital Audio Workstation recording, interactive guitar lessons, jam tracks and more.

The amp has 800 MHz processing power, a woofer for deep lows and dual, 2-inch tweeters for mid-highs.

A learning software includes interactive tabs and lessons from pros including Alyssa Day and Nicklas Myhre. Built-in apps include Spotify and Apple Music, with Bluetooth connectivity.

Lava Studio, which will retail for $999, is to be shipped to crowdfunding backers in November.

A Toy Inventing Journey's Unique WOW

HOW 2 INVENTORS FROM ISRAEL CREATED A NEW KIDS' COOKING PLAY SET

BY APRIL MITCHELL

WHEN I SAW a LinkedIn post by Heftzi Zion-Mozes about her and Limor Hershco's new product, the Melissa & Doug Simmer & Stir Stovetop Play Set, I was intrigued.

It was such a fresh spin and use of Melissa & Doug's Water WOW! innovation and brand, bringing pretend play for kids to the kitchen in a magical way! I interviewed Heftzi and Limor to learn about their journey of creating this new toy and getting it into the perfect company.

A twin spin begins

The inventing journey and partnership of Zion-Mozes (of Jerusalem) and Hershco (of Hod HaSharon, a suburb of Tel Aviv) began in fall 2022. They attended Spin Master's toy accelerator program in Tel Aviv led by Tal Schrieber, who gave them invaluable tools and opened the door for them to the industry. They were both fresh graduates of the program run by Spin Master and Shenkar College of Engineering, Design and Art.

Both came from a different background—Limor as a stage and costume designer for leading children's theater productions in Israel, Heftzi as a drama therapist working with underprivileged children and their families. It quickly became clear that their diverse disciplines were a huge advantage, and their skill sets perfectly complemented each other.

They both wanted to make toys and have fun. Because playing together is always better than playing alone, they decided to join forces.

Little did Heftzi and Limor know that their journey, which began with Spin Master opening the door to toy innovation for them, would eventually come full circle with Spin Master's acquisition of Melissa & Doug and their new toy invention being licensed.

"We're thrilled to celebrate this mutual success under one umbrella." Heftzi said.

Inspiration begets prototype

Heftzi and Limor share a deep love for pretend play, firmly believing it's a powerful way for children to develop cognitively, emotionally and socially.

"Food and kitchen play is always a huge hit with young kids, so we focused our energy there," Limor said. "We kept asking ourselves: How cool would it be if a child, playing in their toy kitchen, could truly 'cook' something and create something new right before their eyes?"

Their challenge was to find a way for kids to play and actually see

Heftzi Zion-Mozes and Limor Hershco's recently launched products—the Simmer & Stir Stovetop Play Set and the Flip & Fry Grill Play Set—represent a full-circle inventing journey that focused on kids' love for food and kitchen play.

PHOTOS COURTESY OF MELISSA & DOUG

a transformation as they "cooked." The duo brainstormed many ideas until they landed on something they thought could work.

"Our first functional prototype came from a raid on our children's play kitchens," Heftzi said, excitedly. "Picture this: a slice of wooden watermelon, a small pot, and, crucially, a forgotten Melissa & Doug Water WOW! booklet.

"We cut out semi-circles for the watermelon, a circle for the pot bottom, grabbed a paintbrush (instead of a mixing spoon), and within minutes, we had a basic proof of concept.

"It was raw, but it worked!"

"The magic wasn't just in the reveal; it was in the process." —HEFTZI ZION-MOZES

Prototyping via 3D

Then came the detailed work.

Heftzi and Limor realized they needed a more concrete way to bring their ideas to fruition, so they dove headfirst into learning 3D modeling. This quickly became a superpower for turning imaginative visions into physical prototypes.

They found that basic 3D print was enough to make a functional model. "We realized that even with simple 3D-printed basic shapes, it's possible to create a functional and impressive model."

They sourced hydrochromatic paint and sheets, diving into the learning curve of making it just right.

Painting with white hydrochromatic paint can be tricky because as you paint, the paint itself is transparent. "Only after it dries do you realize if you did a good job, or if you have a blob of white paint all over the toy carrot," Limor said.

They wanted the utensil to hold water and gradually "cook" the food, just like real cooking takes time. They refined the mixing spoon, understanding that the child's action activating the visible change in real-time was key.

Said Heftzi: "So often, toy transformations are hidden. But here, the magic is that the child is the magician, doing exactly what an adult would do in a real kitchen.

"The magic wasn't just in the reveal; it was in the process."

Limor added, "This also boosts 'replayability.' Unlike many 'one-off' transformation toys, our concept allows kids to 'cook' again and again, building confidence and offering a fantastic value."

Then came the biggest puzzle for the duo to solve: Why would food turn from white to colorful? It didn't quite make sense for little chefs.

The inventors' "aha" moment: frozen food.

"Suddenly, it clicked!" Limor said. "You take a bag of 'frozen' veggies, pop them on the stove, mix, and *voilà*—they 'cook' into vibrant, colorful meals. That storyline made perfect sense for kids and parents alike."

The two inventors built their first prototype for the Simmer & Stir Stovetop Play Set from a wooden watermelon slice, a small pot and a Melissa & Doug Water WOW! booklet, using a paintbrush instead of a mixing spoon.

And here's the pitch ...

Heftzi and Limor's marketing material included a video and a presentation. They felt that the video, featuring Heftzi's daughter playing with their prototype and making veggie soup, brought the concept to life.

"A child actually playing conveys so much more than any text can," Limor said. "It instantly communicates the idea and experience, while answering many questions about how to use the toy." The accompanying presentation showcased renderings and photos of the prototype.

Next came the pitching of the toy concept. Researching and/or knowing a prospective company is critical, and in this case Heftzi and Limor had Melissa & Doug (melissaanddoug.com) in mind when they designed the concept.

"Pitching to Melissa & Doug was truly a dream come true," Heftzi said. "We'd actually developed

"It's been so cool to watch the concept grow—and we can totally see it expanding even further," Limor Hershco said.

this concept with them in mind! What better home for this product than the company that has the amazing Water WOW! brand and is a leading company in pretend play?"

Lee Allentuck, who at the time bridged the gap between inventors and Melissa & Doug, invited them to an inventor pitch event. At this virtual event, they shared their sizzle video with members of Melissa & Doug's Brand and Design teams. The video showcased the toy's features, but more powerfully for Melissa & Doug, the video showed a child's genuine play experience.

"There's so much to be said about those moments, watching their faces, trying to gauge if your pitch is landing," Limor said.

These women are an amazing example of what can happen when we combine our passions, knowledge and the drive to bring innovation into the world.

"After a few moments of silence," Heftzi said, "we received an incredibly positive reaction from everyone on the team.

"We heard, 'That's what making dinner looks like in my house sometimes!' They truly recognized themselves in the play pattern. The team loved that it was a fresh angle on Water WOW!"

A few days later, Melissa & Doug requested their prototype, which they were thrilled about but assumed there was a long way between a positive reaction to a licensing agreement. However, in their case, just two months later they had a "yes" and quickly negotiated a contract.

The perfect fresh twist

Sofia Dumery, SVP of Design at Melissa & Doug, LLC, said her first reaction to seeing the product was "pure excitement. The minute we watched the sizzle and saw this fresh take on Water WOW!—one of our top innovations—we were sold.

"One mark of great innovation is taking a familiar play pattern and giving it a fresh twist. As simple as that sounds to do, it's actually quite challenging: keep it too familiar and it's not differentiated enough, make it too complex and it gets too hard to communicate.

"Heftzi and Limor nailed it with this concept. It also didn't hurt that they decided to focus on play food, one of our key categories at Melissa & Doug."

Once a concept is licensed, there is still much work to be done.

"Once an inventor concept is approved internally, we have a big cross-functional team that helps bring a product to market," Dumery said. "Our brand, design, engineering, product development, safety and quality teams work tirelessly to ensure the very best play experience.

"The biggest hurdle with this item was the spoon itself. To pass our safety standards, we needed to find the right materials and engineer the correct design."

Countless versions led to the final product available for retail today. "While seemingly very simple, there were a lot of nuances to get correct, especially when targeting this young age demographic. It needed to work as expected and work flawlessly each time," she said.

After two years of eager anticipation, Heftzi and Limor are thrilled to see the Simmer & Stir Stovetop Play Set and the Flip & Fry Grill Play Set finally launched.

Said Dumery: "Since we believed so strongly in the concept from the outset, we decided immediately to extend the line. After much exploration by our internal design team, we created the Flip & Fry Grill Play Set, which delivers the same fabulous WOW!"

"Melissa & Doug did an amazing job further developing the concept," Heftzi said. "They took

the original idea and ran with it. Turning water into 'frying oil' was such a fun twist."

Added Limor: "We especially loved how they added playful touches like a ketchup bottle and oil dispenser that releases water in a really natural way. It's been so cool to watch the concept grow—and we can totally see it expanding even further."

Melissa & Doug continuously explores and evaluates opportunities to expand product lines. "We are excited to see what else Melissa & Doug will cook up building on the foundation we created, and it's truly rewarding to witness this continued innovation," Limor said.

A model tale for inventors

It's amazing to learn about inventor stories such as Heftzi and Limor's.

It starts with intrigue, learning, researching and doing the work. These women are an amazing example of what can happen when we combine our passions, knowledge and the drive to bring innovation into the world.

Finding the right partner for a product can be just as important. If they believe in it as much as we do, the possibilities can be endless.

"Heftzi and Limor are true fans of Melissa & Doug," Dumery said. "You can tell by the concepts they present how much they understand and love our brand. It's been wonderful having them focus on our brand, and we always make time to see what they come up with next!"

Limor and Heftzi are ready.

"We truly couldn't have asked for a better partner for this invention," Heftzi said. "Melissa & Doug is the absolute best home for this product, and they genuinely made every part of it work seamlessly. It's clear they believe in this concept just as much as we did when we first developed it." ◆

April Mitchell of 4A's Creations, LLC is an inventor in the toys, games, party and housewares industries. She is a two-time patented inventor, product licensing expert and coach who in 2024 won the TAGIE Award for Game Inventor of the Year.

The Realities of Open Innovation

LOOK FOR COMPANIES WITH OUTSIDE RESOURCES AND IDEAS, AND AVOID THE OTHERS **BY WILLIAM SEIDEL**

OPEN INNOVATION is a valuable concept but a bit misunderstood in practice.

Assuming every company is open to innovation is a mistake. Here are some insights and cautions for both innovators and companies navigating the evolving landscape of open innovation.

Henry Chesbrough, known as the father of open innovation, is the faculty director of the Garwood Center for Corporate Innovation at Berkeley Haas, at the University of California at Berkeley. While in corporate management, he was frustrated with the internal refusal to work with outside sources. His original intent was to be boundary-spanning improving communication and cooperation to advance technology between corporations, government research and universities.

He defines the open innovation paradigm as "the use of purposive inflows and outflows of knowledge to accelerate internal innovation and expand the markets for external use of innovation, respectively."

The most common use is outside-in, where external technologies are brought into the company. Less common is the inside-out, where underutilized technologies are licensed or sold to other companies, usually competitors.

The R&D wall

Open innovation is the opposite of traditional internal R&D. Companies are profit driven when selling their products; governments are technology driven fulfilling secret contracts; universities are driven to publish their research.

They have very different purposes. It's hard to find common ground.

The barriers to open innovation are due to the competitive climate and secrecy surrounding R&D.

Employees and management sign nondisclosure agreements and cannot discuss new products with anyone. When it is unsolicited, it must first go through a submission process.

A small company with 10 to 30 employees may not have a process. But does a small company have the distribution you need or the resources to pay for marketing?

There are advantages to working with the biggest and best companies, but only if they are open to it.

Internet options

Recent internet platforms offer opportunities for opening new communications. These are matching services connecting similarly aligned companies and universities to accelerate research and development.

There has been progress. Halo.Science connects researchers and companies for collaborations and funding opportunities. Ezassi software connects those looking for innovation with innovators.

An excellent example is the development of Tide Pods.

Procter & Gamble wanted a detergent capsule in a pre-measured, dissolvable pack. It contacted MonoSol, a film technology company, to develop a three-chambered, water-soluble film for time-released detergent, stain remover and whitener. This solved the messy multi-steps of laundry and disrupted the laundry detergent industry.

Unilever considers products from start-ups, academics, designers and everyday consumers. This open policy led to new technologies, and now more than 60 percent of the

company's research projects are from external collaboration.

Ignoring outside ideas runs the risks of missed opportunities. Two decades of open innovation have shown the biggest barriers to be inside the organization, not outside, because of IP contamination or strategic misalignment.

This one still hurts

Companies often don't recognize innovation. It took Spencer Silver and Art Fry 12 years to convince 3M of the value of Post-it Notes because management believed it was a failed adhesive. And this was from 3M's internal R&D department.

The SuperSoaker squirt gun was turned down by most toy companies, licensed three times to mid-level companies, two defaulted—and after seven years, the third licensee realized a billion-dollar hit.

I discovered Jay Kordich, the Juiceman, a pitchman selling his juicers in Seattle with great success. We shot a pilot, and our customer tests showed it sold 10 times more than our best-selling product.

When I presented it to the board, members said 'He's not part of the company. The competition would bury us,' and the price was too high.

They refused to believe the customers. Denying a proven product because of personal opinions is usually a fatal mistake.

Jay went to a competitor with our pilot, secured a deal and sold $100 million in the first year. I'm still sour from that one.

What to look for, and avoid

Most companies have an inner circle of R&D, suppliers, vendors and a few outside resources. These are the companies you want to work with but the hardest with which to establish a relationship.

Open innovation rates vary widely by industry, market, and company size. But from my experience, only about 20 percent of companies accept product ideas from outside their inner circle, depending on the industry.

This is what Chesbrough is trying to change.

According to McKinsey & Co., half the products selected are from suppliers, independent researchers and customers. Companies review thousands of products and accept only a few.

They may accept "qualified submissions"—but "qualified" means patented and with an agreement releasing the receiver from exposure.

The barriers to open innovation are due to the competitive climate and secrecy surrounding R&D.

Be careful before agreeing on anything. A clause from a leading company's submission agreement:

"You agree that (1) your submissions and their contents will automatically become the property of _____, without any compensation to you; (2) We may use or redistribute the submissions and their contents for any purpose and in any way; (3) there is no obligation for us to review the submission; and (4) there is no obligation to keep any submissions confidential."

This is an agreement you do not sign.

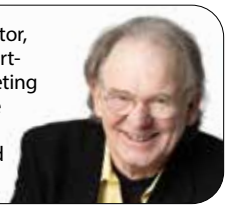
Don't work with a company with no outside resources. The right company is trustworthy and has the distribution, manufacturing and marketing strength to create demand.

Find the right company with the horsepower to drive the idea into the market, and willing to pay you.

Last word

Companies cannot afford to rely entirely on their internal sources. The purpose of any business is to grow. And to grow, the business must innovate—or evaporate.

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



Your Drill on Drilling

UNDERSTAND THE 4 MAIN COMPONENTS IN THE ART OF MAKING HOLES FOR PROTOTYPING

BY JACK LANDER

OTHER THAN sawing something into two pieces, drilling a hole is the simplest machining process.

Drilling holes comes down to four main components:

- Material to be drilled;
- "Rake"—the angle that the drill's cutting edge makes with the material to be cut;
- Speed in feet per minute—the radius of the drill times the rotations per minute;
- Pressure—the ounces or pounds of pressure the operator applies to the drill bit.

Most of us operate from experience rather than formally adjust each of the four factors above.

But we do perform an unconscious assessment of each factor, whether we admit it or not. If we were setting up an automatic drilling station for a production line, we would take the time to optimize each factor.

Determining rake

Recently, I have been engineering a prototype that uses an acrylic part in which I drill two holes.

I am well aware that the four factors must be adjusted to minimize melting the acrylic due to the natural friction between the drill tip and the acrylic. So, I set the drill speed as slow as my little press allows, and I use a "woodpecker" approach to increase the ratio of heating time (drilling) to cooling time (a pause of the drill in the air).

This is about half a second to five seconds. This ratio almost works. I still find a blob of melted plastic on the drill occasionally.

The factor most puzzling to many of us is rake.

Imagine you are digging a hole in ordinary dirt. You wouldn't set your spade at 90 degrees to the ground before applying foot pressure; the pulling load would be much too heavy. You would set the angle around 45 degrees, and your pulling load on the spade handle would be much lighter to allow you to eject a spade full of dirt.

Rake on the drill bit is similar. A sharp angle enables the drill bit to dig into the material—that is, a relatively soft material such as wood.

I had changed my rake angle a few times over the years of my work on prototypes, but artificial intelligence wasn't around to guide me during those years. So, out of curiosity I Googled "rake angles," and Google surprisingly came through.

The factor most puzzling to many of us is rake—the angle that the drill's cutting edge makes with the material to be cut.

It told me that rake depended on the hardness of the material to be cut.

That typical "hardware store" drill bit rake angles range from 20 to 30 degrees—the latter angle for cutting wood or aluminum. But for cutting high-carbon steel, a rake angle of 2 to 12 degrees is recommended. Obviously, using a rake angle of 30 degrees to attempt to drill high-carbon steel would wreck the drill bit very quickly.

Elated as I was about the answers Google was giving me, I asked the toughest question of all: What rake angle is best for drilling acrylic?

The answer I received was 0 to 4 degrees. Heck, that's nearly straight up and down.

So (thanks, *Inventors Digest*), I just learned the correct rake angle for my present acrylic drilling. I've asked several machinists at times for advice on rake, and most don't have any book knowledge of the subject even if they do have experience.

You can see an excellent graphic of a 4-degree rake on Google by asking, "What rake angle is best for drilling acrylic?" Also, you can change the rake of an ordinary spiral drill bit by grinding it yourself.

You can buy flat spade drill bits (no spiral) for cutting wood. They work just fine with a 0-degree rake.

Materials, speed, pressure

As you have just learned about rake, you can see the close relationship between rake angle and material hardness. But suppose you don't know how hard a material is?

Marble, for example. Assume it's hard, but not as hard as carbon steel, which uses a 12-degree rake.

Grind the rake on an ordinary drill to around 12 degrees and try it. If it works well, you have a simple way to estimate the hardness of the material. The best rake angle for drilling it: 15 degrees.

As for speed, the common sense of it is to run as fast as you can without ruining the cutting edge of the drill bit. You'll know you are setting a speed too high when you see the cutting edge turning colors, especially running red hot. Too late!

Last but not least, pressure.

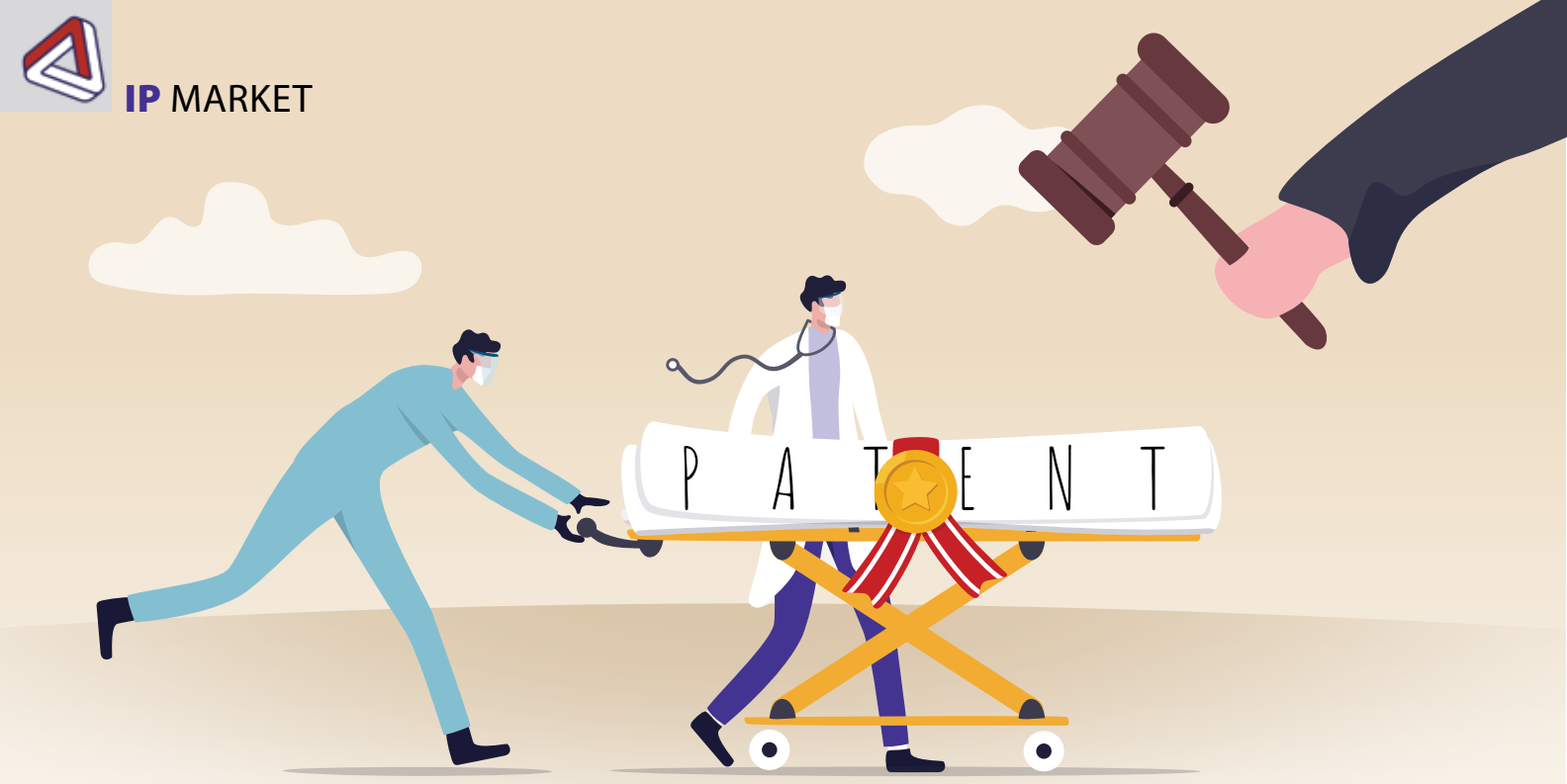
Pressure is similar to speed. The more pressure, the more you'll heat the cutting edge of your drill.

However, pressure determines the appearance of the chips.

Ideally, you want a well-formed chip. Too light a pressure, and you'll be scraping rather than cutting. Excessive pressure, and you'll overheat the cutting edge. This is where trial and error is your teacher.

Put all four factors together, plus a little Google advice, and you'll become an enviable expert in the art of drilling holes. ◆

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



Doing CPR on Patents

REVIVAL AFTER 'UNINTENTIONAL' ABANDONMENT MAY HAVE LONG-TERM CONSEQUENCES **BY LOUIS CARBONNEAU**

PATENT HOLDERS face severe enforcement vulnerabilities when attempting to revive lapsed patents or abandoned applications under false premises about "unintentional" abandonment. Although the USPTO may gladly accept reinstatement petitions and fees—because who doesn't love money?—patents and applications revived on questionable grounds create permanent litigation liabilities that can lead to unenforceability.

The same revival rules apply to both abandoned pending applications and expired patents.

Under Title 35 of U.S. Patent Code, abandonment must be genuinely "unintentional"—whether dealing with a failure to respond to an Office Action or failure to pay maintenance fees. The entire delay from original abandonment through petition filing cannot involve any deliberate decision making.

The foundational *In re Maldague* (1988) case established that strategic business decisions, even if later regretted, constitute intentional abandonment that precludes revival. When Belgonucleaire's agent deliberately chose not to respond to a final Office Action after reviewing prior art, the commissioner ruled this intentional abandonment could not be cured by subsequent changed circumstances.

In other words, "I changed my mind" is not a valid legal strategy.

This creates the first major pitfall: Inventors who assume business-driven delays can be characterized as "unintentional" face potential inequitable conduct liability.

The USPTO's general acceptance of unintentional delay statements while relying on practitioner candor does not insulate patents from later challenge.

Recent cases like *Freshub v. Amazon* (2024) demonstrate that even five-year delays before revival of abandoned applications can trigger serious inequitable conduct challenges during litigation. Apparently, courts are less trusting than the USPTO.

And USPTO acceptance doesn't guarantee litigation survival. Even when patent offices accept

reinstatement, courts apply heightened scrutiny to the underlying abandonment circumstances, regardless of whether the issue involves pending applications or expired patents.

In *Network Signatures v. State Farm* (2013), the United States Court of Appeals for the Federal Circuit provided limited protection for using standard USPTO forms. But the decision's narrow scope (maintenance fees only) leaves application abandonment cases vulnerable.

The recent *Freshub v. Amazon* (2024) case demonstrates that while inequitable conduct claims face high evidentiary burdens, five-year delays before revival still trigger serious litigation challenges. Apparently, judges are less impressed by retroactive explanations than patent examiners.

Abandoned applications face particular vulnerability because the USPTO has revived approximately 73,000 patent applications since 1982, creating a massive pool of potentially questionable patents. That's a lot of "oops, didn't mean to" moments.

The *Aristocrat v. IGT* litigation revealed how courts can invalidate entire patent families when underlying applications were improperly revived—a reminder that bad foundations make for shaky houses.

U.S. standard more lenient

The U.S. "unintentional" standard is notably more lenient than other major jurisdictions—because America loves second chances, even dubious ones.

The European Patent Office requires "all due care" with detailed upfront evidence and strict two-month deadlines. Canada follows the U.S. model, but Japan historically required "justifiable cause" (though transitioning to "unintentional" for post-2023 applications).

This disparity creates strategic vulnerabilities when patents are challenged across multiple jurisdictions. What passes for "unintentional" in Alexandria might not fly in Munich.

Federal circuit precedent shows courts scrutinize whether abandonment resulted from: strategic business decisions, commercial viability assessments, or conscious prosecution choices (all intentional); versus attorney errors, docketing failures, or genuine mistakes (potentially unintentional).

The *Rembrandt Technologies* (2018) case warned that inappropriate "unintentional" statements can render patents unenforceable for inequitable conduct. Turns out courts are surprisingly good at detecting creative interpretations of "unintentional."

Timing is everything

The timing of revival petitions creates additional vulnerabilities.

USPTO guidance clarifies that petitions filed more than two years after abandonment face heightened scrutiny and require detailed explanations of circumstances. Courts view delayed revival attempts with suspicion, particularly when they coincide with competitor product launches or litigation threats.

Funny how these "unintentional" discoveries always seem to happen right after someone else gets successful.

Research reveals that reinstated patents encounter higher settlement rates, intervening rights complications, and reduced damages potential. About 40 percent of litigated patents face invalidity challenges, but reinstated patents suffer additional vulnerabilities from procedural defects and heightened judicial skepticism.

The USPTO's general acceptance of unintentional delay statements while relying on practitioner candor does not insulate patents from later challenge.

The *Aristocrat v. IGT* (2008) decision confirmed that while "improper revival" cannot be a direct invalidity defense, it supports powerful inequitable conduct claims. It's like having a pre-existing condition—technically covered, but everyone knows there's something wrong with it.

Applications revived after abandonment face particular risks because their prosecution history becomes a roadmap for challenging validity. Unlike maintenance fee lapses, which are often administrative oversights—the patent equivalent of forgetting to pay your electric bill—application abandonment typically involves substantive prosecution decisions that create discoverable evidence of intent.

The critical pitfall is that even successful USPTO reinstatement creates permanent vulnerabilities that follow the patent through its remaining term, whether dealing with revived applications or expired patents. Patent holders who assume reinstatement is merely administrative—like renewing a driver's license—face discovery burdens, expert testimony requirements, and potential findings of unenforceability that can eliminate an entire patent portfolio's value.

Surprise: Opposing counsels are significantly less forgiving than USPTO examiners.

The critical pitfall is that even successful USPTO reinstatement creates permanent vulnerabilities that follow the patent through its remaining term.

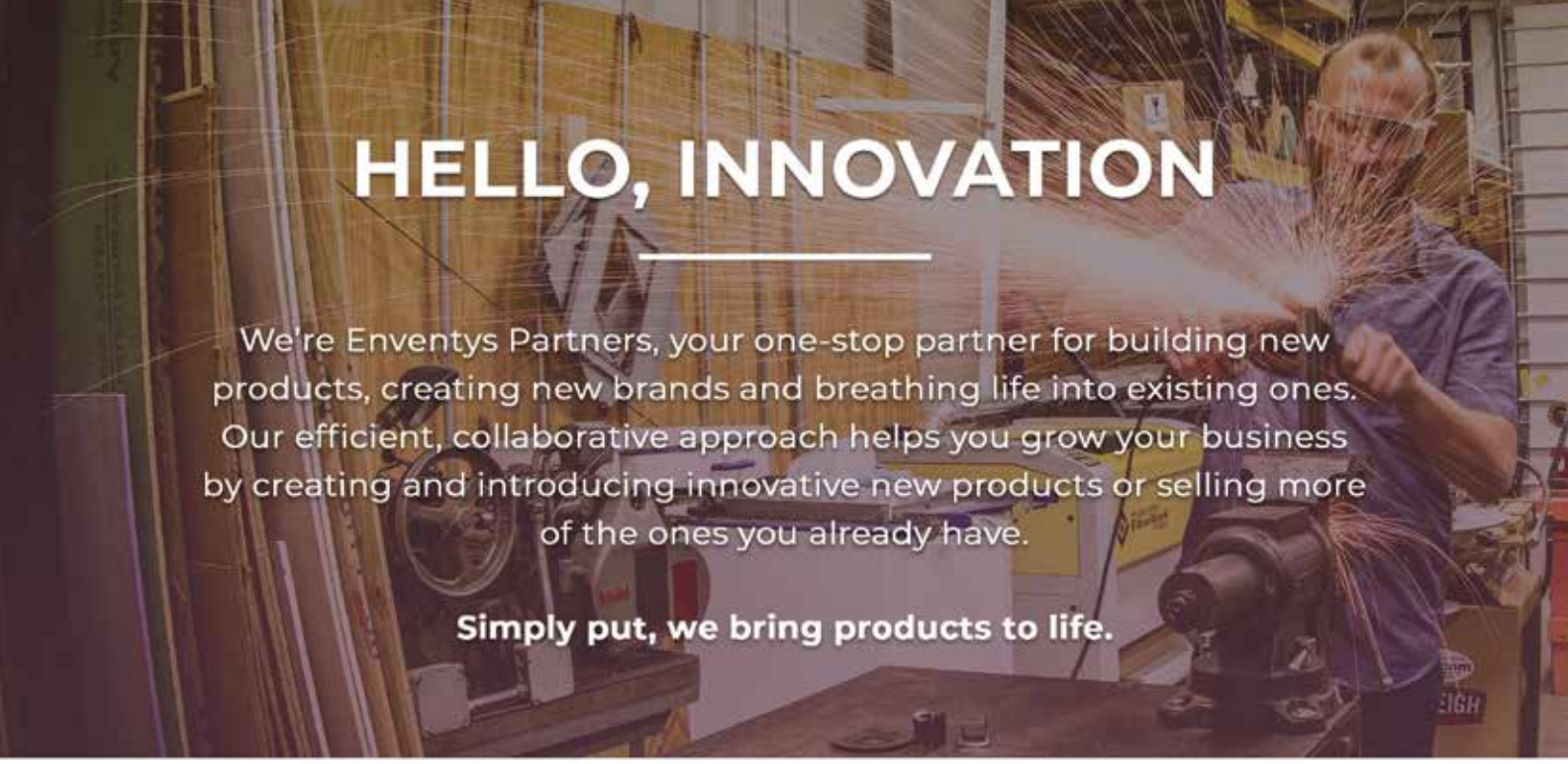
Think hard about revival

Smart patent strategy requires robust docketing systems, comprehensive documentation of any abandonment circumstances, and realistic assessment that revival under questionable circumstances may create more problems than solutions.

The identical legal standards for both pending applications and issued patents mean that the same strategic cautions apply regardless of whether dealing with Office Action deadlines or maintenance fee payments.

In the immortal words of patent law: Just because you can doesn't mean you should.

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.



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Squires to Lead USPTO

SENATE CONFIRMATION FOLLOWS NEW DIRECTOR'S CLARIFICATION ON COMMENTS ABOUT QUALITY OF PATENTS

BY EILEEN MCDERMOTT

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

JOHN SQUIRES was officially confirmed by the U.S. Senate on September 18 to be the next under secretary of commerce for intellectual property and director of the United States Patent and Trademark Office.

During his confirmation hearing in May, Squires emphasized his goal of making patents strong up front. Since then, Acting Director Coke Morgan Stewart took a number of measures that many feel are patent owner-friendly and aimed at restoring quiet title to patents. She called it a "level-setting" at the recent IPWatchdog Women's Forum.

Quality controversy

Squires had been criticized for comments regarding the poor quality of patents being issued by the office. During his Senate confirmation hearing, he was asked by Sen. Adam Schiff (D-California): "Do you believe that approximately 68 out of 100 U.S. patents that are currently in force are defective?"

Squires replied "no," adding that "the statistics I mentioned are those published by the USPTO concerning claim cancellation upon challenge at the PTAB [Patent Trial and Appeal Board] which are a small subset of all issued patents, not a measure of quality at the front end."

Squires reiterated his philosophy that patents should be "born strong," including not erroneously rejecting claims that should be issued.

"I believe it is to the benefit of all stakeholders if prior art is identified and applied at the earliest stage of examination or post issuance, as we benefit as a society from patents 'born strong,' beginning with the original patent grant," Squires wrote.

Advocating balance

Sen. Peter Welch (D-Vermont) noted that because of the rate of discretionary denials of *inter partes* reviews (IPRs), the institution rate has dropped from 68 percent to 43 percent since "the publication of a new rule." This presumably referred to Acting Director Coke Morgan Stewart's interim procedure for PTAB workload management—under which she denied institution on many dozens of petitions that challenged patents.

Welch seemed concerned about the decrease and asked Squires how he would address it. He replied:

"As to the drop in the rate, I would want to explore the avenues of redress where that is headed, whether it be district court or elsewhere. If confirmed, I look forward to working with stakeholders the USPTO and Congress to ensure that the PTAB fulfills Congressional intent as to all aspects."

Sen. Chuck Grassley (R-Iowa) asked Squires whether he intends to "alter the PTAB's authority or restrict access to IPRs." Squires said he has no such intentions and prefers a "balanced approach."

Squires was also asked by Senator Grassley whether he would keep the policies in place regarding discretionary denials that have been implemented by Stewart—including whether he agreed with the decision to rescind the 2022 memo by then-Director Kathi Vidal that put at least temporary restrictions on discretionary denials.

Squires was noncommittal, saying he needs to understand the underlying policy changes and operational considerations, and would work with Stewart and USPTO management to ensure the PTAB meets Congressional intent to provide a faster, cheaper alternative to litigation.

Then, later in his answers, in response to a question from Sen. John Cornyn (R-Texas), Squires did commit to not using discretionary denial authority as previous directors have:

Cornyn: Will you commit to requiring the agency you lead to operate the PTAB as Congress articulated in the America Invents Act and not exceed the authority granted to discretionarily deny petitions for review as previous directors have done?

Squires: Yes.

'A decisive moment'

Kristen Osenga, chief policy counsel at the Inventors Defense Alliance, said in written comments sent to IPWatchdog that the confirmation "comes at a decisive moment for American innovation and economic growth."

He reiterated his philosophy that patents should be "born strong," including not erroneously rejecting claims that should be issued.

She added: "With his deep expertise in intellectual property law and innovation policy, Director Squires is well positioned to strengthen the patent system, protect inventors, and foster entrepreneurship nationwide."

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

IoT Corner

As technically sophisticated as artificial intelligence is, it's still at the mercy of a simple necessity: connectivity.

Poor connectivity from Internet of Things (IoT) devices is hindering the adoption of artificial intelligence in more than one-third of businesses (34 percent), according to a new State of IoT report from global IoT company Eseye. The research surveyed 1,200 senior IoT decision-makers.

This performance gap exists despite most business leaders stating that high connectivity performance is essential for device uptime.

Wunderkinds

Tyler Malkin, a 14-year-old from Greenwich, Connecticut, won the $10,000 Robert Wood Johnson Foundation Award for Health Advancement at the most recent Thermo Fisher Scientific Junior Innovators Challenge. Tyler, who has experienced iodine deficiency—which affects nearly 2 billion people worldwide—developed a saliva test that makes it easier for people to monitor their iodine levels without medical intervention.

What IS That?

This time, you don't have to guess. Pick out one and hand it to a friend. Just don't tell him or her what is in the typical hot dog, unless you want to cause a different kind of problem.

Get Busy!

Either in person or virtually, plan to attend an international workshop roundtable on artificial intelligence, industrial designs and inventorship on October 22 from 10 a.m. to noon ET. The event will be at United States Patent and Trademark Office headquarters in Alexandria, Virginia. Registration is required by October 21. *uspto.gov/about-us/events/ai-industrial-designs*

WHAT DO YOU KNOW?

1 **True or false:** **Halloween is a trademark.**

2 **"The Tonight Show" trademark was registered with the United States Patent and Trademark Office in which year?**

A) 1954 **B)** 1962 **C)** 1972 **D)** 1975

3 **Per the most recent data available from the International Property Center, how many trademark applications and registrations include the word "Halloween" in the USPTO database?**

A) 111 **B)** 381 **C)** 861 **D)** 1,321

4 **Which was invented first—candy corn, or pumpkin pie?**

5 **True or false:** **Publicdomainvectors.org offers copyright-free vector images in popular formats such as .eps, .svg, .ai and .cdr that can be edited, distributed and used for unlimited commercial purposes.**

ANSWERS: 1. True. "Halloween" and "Michael Myers" are registered trademarks of Compass International Pictures, Inc. 2. D. The show debuted on NBC Television in 1954, named Johnny Carson host in 1962, and moved to Los Angeles in 1972. 3. B. 4. The first recipe for pumpkin pie with a crust was published by French chef Francois Pier re de la Varenne in 1651; candy corn was invented in the 1880s by George Renninger. 5. True. What are you waiting for?

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