

SAY HELLO TO INNOVATION

At Enventys Partners, we build new products, create new brands and breathe new life into existing ones using an efficient, collaborative approach. We believe there are two ways to grow your business: introduce innovative new products or sell more of the products you already have. Whichever approach fits your needs, we can help you thrive with a proven strategy that delivers quantifiable results.

Put simply, we build new products and then help you market them.

WHAT WE DO



Product Development



Industrial Design



Engineering & Prototyping



Sourcing



Market Research



Crowdfunding



Digital Marketing



Public Relations

For more information and to view samples of our work, visit **enventyspartners.com** or call us at 704-333-5335.

ENVENTYSPARTNERS

Inventors

EDITOR-IN-CHIEFREID CREAGER

ART DIRECTOR
CARRIE BOYD

CONTRIBUTORS

ELIZABETH BREEDLOVE
HOWIE BUSCH
LOUIS CARBONNEAU
DON DEBELAK
ALYSON DUTCH
JACK LANDER
JEREMY LOSAW
GENE QUINN
EDIE TOLCHIN

GRAPHIC DESIGNERJORGE ZEGARRA

INVENTORS DIGEST LLC

PUBLISHERLOUIS FOREMAN

WEBSITE ADMINISTRATORELIZABETH BREEDLOVE

FINANCIAL CONTROLLER
DEBBIE MUENCH

SUBSCRIPTIONS LOURDES RODRIGUEZ

© 2019 Inventors Digest, LLC. All rights reserved. Inventors Digest, LLC is a North Carolina limited liability company and is the publisher of Inventors Digest magazine. INVENTORS DIGEST and INVENTORS' DIGEST are trademarks of Inventors Digest, LLC. Reproduction or distribution of any materials obtained in this publication without written permission is expressly prohibited. The views, claims and opinions expressed in article and advertisements herein are not necessarily those of Inventors Digest, LLC, its employees, agents or directors. This publication and any references to products or services are provided "as is" without any expressed or implied warranty or term of any kind. While effort is made to ensure accuracy in the content of the information presented herein, Inventors Digest, LLC is not responsible for any errors, misprints or misinformation. Any legal information contained herein is not to be construed as legal advice and is provided for entertainment or educational purposes only. Interested parties and inventors seeking legal advice should consult a lawyer.

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



Time to Put 'Crisis' in the Right Perspective

The decade of the 20teens comes to a close this month, but there are still some sophomoric notions when it comes to the state of patent quality in America.

These alarmist notions are bad for business. Maybe more important, they're a buzzkill for inventing.

On November 6, the Innovation Alliance sought to counter these claims via a letter to the Senate Judiciary IP Subcommittee. It refuted the assertion that there is a "crisis" in patent quality.

The Innovation Alliance reminded committee members that the term "poor-quality patent" is often mistakenly used when referring to a patent that may actually be strong in substance but "stands in the way of someone who wishes to use the invention protected by the patent without taking out a license to do so."

The alliance also said—as you have read many times in *Inventors Digest*—that the true crisis in the patent system is the ongoing uncertainty about what is patent eligible. The alliance called this the "dire state of Section 101 jurisprudence."

(Section 101 of the U.S. Patent Act says that a patent may be obtained for new and useful processes, machines, manufactures, and compositions of matter. However, the Supreme Court has often held that there are exceptions to subject-matter eligibility.)

Ron Katznelson, a technology entrepreneur, independent scholar of the patent system and holder of 23 U.S. patents, noted in his testimony that the patent litigation rate has been remarkably steady for nearly a century: fewer than two litigations per 1,000 patents issued. So where is this patent-quality crisis?

It has often been said that the stock market is so fragile because it rises and falls on simple perception. Once the public senses a strong positive or negative shift, it's often hard to stop that momentum.

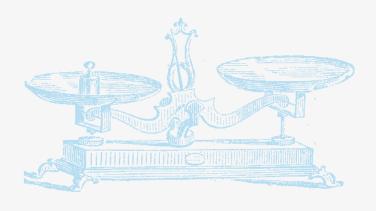
Patent perception is much the same animal. The paranoid narrative about "patent trolls" (companies that buy patents solely to profit via licensing or litigation) has also damaged perception; many claim that Big Tech used it to help get laws passed to further its monopolies. When United States Patent and Trademark Office Director Andrei Iancu shot down that narrative, the patent buzzkill crowd turned to an imagined patent "crisis."

A patent is a right of exclusivity, a tool to generate profit. Period. Profit drives capitalism and our entrepreneurial system. When our patent system is in good health, anyone can benefit.

As we turn to a new decade, let's focus on fixing the real problem with our patent system so we can enjoy a new Roaring Twenties.

—Reid (reid.creager@inventorsdigest.com)

American innovation needs to hit the gym









Weakened patent protections have reduced the value of American inventions. To strengthen American innovation, support the STRONGER Patents Act—legislation designed to restore strong Constitutional patent rights, limit unfair patent challenges, and end the diversion of USPTO fees.

Make your voice heard now at SaveTheInventor.com





Features

- 22 Animation Innovation
 Wonder Media Partners
 Get Creative to Inspire,
 Educate At-Risk Children
- 28 Best of 2019
 Key Invention Award Winners

Inventor Spotlight

- 16 Seeing the Light
 Glasses to Combat SAD
- **18 Genius in the Fold** Space-saving Toys

Departments

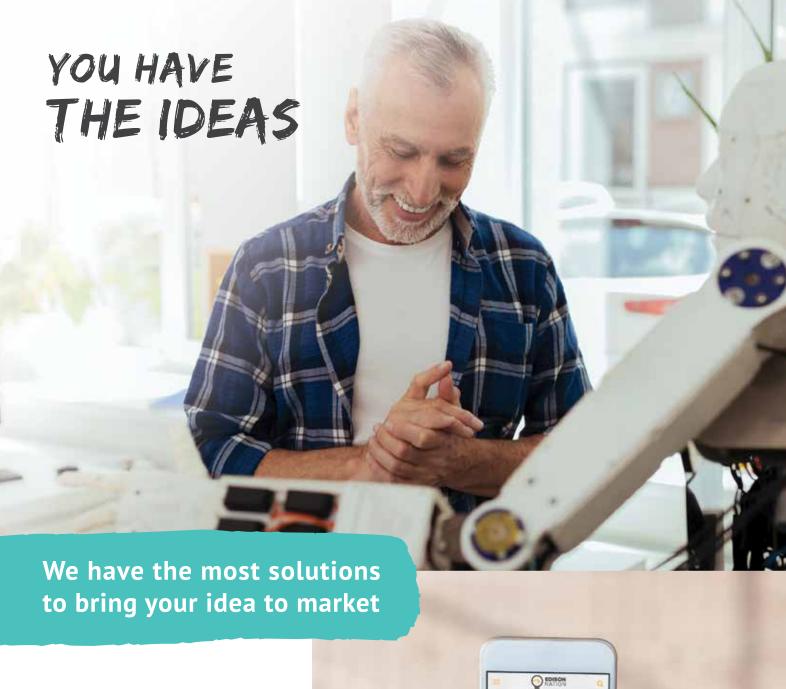
- 7 Everybody's Talking Conversation Pieces
- 8 Bright Ideas
 Innovation That Shines
- **10 Time Tested**The Red Flyer Wagon
- 12 Lander Zone
 The Million-Dollar Tagline
- 14 Social Hour Using LinkedIn Ads
- 34 To Market Equity Crowdfunding
- **36 Prototyping**Maxing out CES
- 38 IP Market
 Active Times
- **41 Inventing 101**Your Distribution Strategy
- 42 Eye on Washington
 U.S. Patent Filings Decrease
 For the First Time in 10 Years
- **46 Inventiveness** Focus on the Fun and Fascinating



28



ON THE COVER Terry Thoren (left) and his partner in Wonder Media, LLC, Ryan Cannon

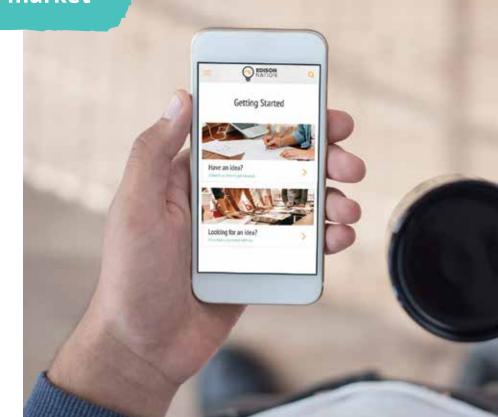


Edison Nation is the only innovation partner that has multiple channels to take inventors' product ideas to consumers worldwide.

JOIN US TODAY

www.EdisonNation.com





Everybody's Talking

CORRESPONDENCE

Letters and emails in reaction to new and older **Inventors Digest** *stories you read in print or online* (responses may be edited for clarity and brevity):

"5 Tips From a Patent Attorney" (November 2017):

Thank you for your tip to shop around when looking for a patent lawyer but to not shop around too much. My brother works in biotechnology and he was telling me that they were trying to get a patent on something they made. I'll be sure to pass this tip along to him so they can speed up the process. —SKYLER WILLIAMS

It made sense when you explained that patent attorneys and agents sell services and not products, so we need to be prepared to pay them for their time.

My brother wants to find a patent service for the software he and his friend have developed over the past year. I think your article would be valuable to him so he can have an idea of what to expect from working with a patent service for his invention! —EILEEN BENSON "Top Trade Shows for Inventors" (January 2019):

Some fantastic trade show events this year! Thanks for the calendar post. Will definitely share it.

-ANDREW, MOVEINMEDIA.COM

Editor's note: Look for our annual listing of major inventor-related trade shows for the upcoming year in next month's Inventors Digest.



CONTACT US

Letters:

Inventors Digest 520 Elliot Street Charlotte, NC 28202

Online:

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

NOT SO FAST, TAYLOR SWIFT

More than a year and a half after a second copyright lawsuit involving her most recognizable song was dismissed, Taylor Swift still can't shake off the allegations.

The most recent claim that the pop superstar lifted some lyrics in her 2014 smash "Shake it Off" was thrown out in February 2018. But in late October, the Ninth Circuit Court of Appeals ruled that a U.S. district court judge's action was too hasty.

Songwriters Sean Hall and Nathan Butler alleged in 2017 that in her song, Swift illegally copied a six-word phrase and a four-part lyrical sequence from their band 3LW's 2001 song "Playas Gon' Play."

We'll spare you the, uh, ungrammatical lyrics in question. The bottom line is that Hall and Butler claimed in 2001, "playas" and "haters" was a "completely original and unique" lyrical combination.

In dismissing that suit, the district court noted many uses of the words/terms "player," "playa," "hater," and "hata" in combinations before 2001. The court said the

lyrics in question in Swift's song "constituted a short phrase that was insufficiently creative or original to warrant copyright protection."

The appeals court disagreed, explaining its October 29 decision:

"The district court dismissed the complaint based on a lack of originality in the pertinent portions of Hall's work." But the appeals court maintained that Hall's complaint plausibly alleged originality and blasted the district court for making itself "the final judge of the worth of an expressive work."

The respective legal teams' reactions to the latest verdict were decidedly more articulate than the lyrics in question.

In praise of the ruling, Hall said: "This case is giving voice to all of those creatives who can't afford to stand up and protect their work in the face of well-financed Goliaths."

An unnamed representative for Swift had this response, according to Rolling Stone:

"These men are not the originators, or creators, of the common phrases 'Players' or 'Haters' or combinations of them. They did not invent these common phrases nor are they the first to use them in a song. We are confident the true writers of 'Shake It Off' will prevail again.

"Their claim is not a crusade for all creatives; it is a crusade for Mr. Hall's bank

In November 2015, U.S.-based R&B singer Jesse Braham filed suit against Swift, also claiming that in "Shake it Off" she stole some of the lyrics from his 2013 song "Haters Gonna Hate." His pursuit of \$42 million in damages was rejected by a different U.S. district judge.



BRIGHTIDEAS

Sonny

ECO-FRIENDLY PORTABLE BIDET sonny.com

Sonny is a sustainable alternative to wipes and toilet paper, with the goal of better hygiene.

Installation and plumbing free,
the anodized aluminum tube sprays
water with a targeted pressure flow.
It requires no installation and features a
modern, sleek design; a three-week charge;
an antibacterial, interchangeable nozzle head; and
normal and high spray settings.

By using Sonny, its makers claim you can save 1,739 gallons of water per year that is used to make toilet paper while also saving countless trees.

Sonny has a retail price of \$140. Shipping for crowdfunding backers is set for March.



fu bet 78 ph. \$32

Espresso Displays
THIN, PORTABLE
TOUCHSCREEN MONITOR
espressodisplays.com

Thinner than a laptop at just 5mm and weighing only 690 grams, the display turns your laptop into a workstation anywhere.

The Espresso Display has a high-resolution touchscreen in full high definition and comes with unique mounts and accessories. Built from aeronautical-grade aluminum, it enables you to add touchscreen functions to your Mac or PC; easily multi-task between apps; and double your screen space.

The display is compatible with Nintendo Switch, PS4 and XBOX consoles, as well as with many phone types. A 13.3-inch monitor will retail for \$320, with an April shipping timetable.

The Masters Collection

HIGH-GRADE, IN-HOME COOKWARE ausker.com

This die-cast aluminum cookware features PEEK coating, a groundbreaking scratch-and-wear-resistant non-stick technology.

The coating was initially developed to protect key parts in medical, automotive, and aerospace tools and engines. The coat is fabricated with a triple-layer application, followed by a double-cooking process for unfaltering resilience.

Among the technology's benefits are thermal insulation, as well as hydrolysis, chemical, scratch and abrasion resistance. Handle sleeves can be removed for cleaning or baking.

The complete collection—with three pots, two frying pans and one grill pan—will retail for \$540. Crowdfunding backers will receive delivery beginning in April.

"Innovation happens when you change the game; you bring a different twist to what is currently established and perceived."—PEARL ZHU





Hemp Eyewear
HEMP SUNGLASSES
hempeyewear.com

Billed as the world's first hemp sunglasses line, Hemp Eyewear makes environmentally friendly spectacles that feature a unique finish and comfortable fit. All frames are completely crafted by hand.

Hemp glasses come in three styles, three frame colors and four lens colors. Each pair of glasses comes with a hemp fabric box, protective hemp pouch and microfiber cleaning cloth.

The material is made of thousands of individual plant fibers. Hemp's fibers create unique patterns, which makes each pair of sunglasses different.

The eyewear will retail for \$230 and has a projected April shipping timetable for crowdfunding backers.

PHOTOS COURTESY OF RADIO FLYER

Icon for All Seasons

RED FLYER WAGON SHOWN IN 'A CHRISTMAS STORY' HAS THAT AMERICANA PULL BY REID CREAGER

■ OR AS LITTLE as 25 bucks on eBay, you can pick up a miniature Radio Flyer toy wagon that was sold at the 1933 Chicago World's Fair. What you will hold in your hand is an iconic symbol of Christmas—and the American Dream.

The December 2016 Inventors Digest featured one of the most memorable covers in its soon-to-be 35-year history: the leg lamp from the movie classic "A Christmas Story." But the Radio Flyer red wagons in the window of Higbee's department store at the beginning of the film represent something with more meaningful, real-life pull: a poignant reminder of a simpler and more innocent time.

> Pop culture hasn't forgotten. The Radio Flyer was the vehicle of choice for comic strip pals Calvin and Hobbes as they discussed philosophical matters large and small.

title of a dark 1992 movie in which a father recalled his forgettable childhood in the suburbs.

Radio Flyer Inc. rolls on today, two years after celebrating its 100th anniversary. In 1999, the wagon was inducted into the National Toy Hall of Fame; in 2015, Fortune magazine ranked the company No. 1 on its list of the 25 small businesses at which to work.

None of this would have come to be were it not for an Italian who moved to America as a 16-year-old to make a better life in 1913.

Risk of a lifetime

The '33 World's Fair was where Antonio Pasin's gutsy gamble ensured his wheels would stay in motion.

He had come to America 19 years earlier, performing that boat with no money, no friends, nobody," his wife



company's first wagon.

Antonio Pasin's marketing gamble at the 1933 Chicago World's Fair helped cement the Red Flyer's place in American history.

Eventually, he saved enough money to rent a oneroom workshop for building wagons. His father's and grandfather's experience as cabinet makers had carried to another generation.

Pasin's wooden Liberty Coaster wagon—named for the statue that welcomed him to America—was a resounding hit. He formed his company in 1917. By the late 1920s, in the style of the trend-setting automotive industry, his wagons evolved into a stamped-steel construction. He came up with the name Radio Flyer as a tribute to two of the world's most influential inventions to date.

The company was reportedly cranking out 1,500 wagons per day, even during the Great Depression. But Pasin wanted to cement the viability of Radio Steel & MFG Co. on a larger scale, so he used the World's Fair to unveil two displays of marketing genius.

The first was his decision to sell 4-inch scale models of the Red Flyer as souvenirs for 25 cents, an inexpensive trinket for young kids and a way for everyone to remember the toy for years afterward. The second was a novelty in the opposite extreme: a 45-foot-tall sculpture of a boy crouching in a Radio Flyer wagon, strategically positioned as part of a kids' entertainment area at the fairgrounds, "Enchanted Island."

"Coaster Boy" was part of a \$30,000 investment by Pasin at the fair, one that could have threatened the company's future if unsuccessful.

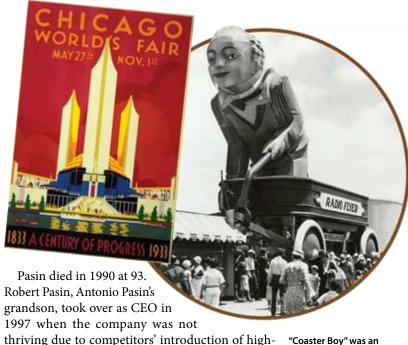
He had a family to support in America by then; his wife said it was the only time in her life she saw him nervous. But as he said, "I enter so many ventures in business with more nerve than capital."

Pasin's team reportedly sold more than 120,000 miniature coaster wagons at the Coaster Boy exhibit by the time the fair ended in 1934. The company remained a strong presence in America throughout the challenging times of World War II and beyond.

In a 1973 advertisement, the Radio Flyer says it is the "only wagon that outsells Ford station wagons."

Staying relevant

The company is still based in Chicago, with inevitable changes through the decades.



Radio Flyer eventually developed its own successful plastic version. The company also decided to focus solely on children's projects—now including scooters, tricycles, ride-ons and horses—as part of its recovery.

quality plastic wagons.

Antonio Pasin was inducted into the Toy Industry Hall of Fame in 2003. His wife, who was 107 when she died in 2016, lived to see it.

But whatever happened to Coaster Boy?

His fate is not definitively clear. But Radio Flyer paid homage to him with a 40-foot, 15,000-pound sculpture called the "World's Largest Wagon" in honor of the company's 80th anniversary.

It's still parked outside the company's corporate offices—dramatic proof that its people are still thinking big, in the unflinching spirit of its founder. •

"Coaster Boy" was an ominous-looking, 45-foot-tall sculpture that was part of a scary \$30,000 investment by Antonio Pasin.

INVENTOR ARCHIVES: DECEMBER

December 3, 1795: Rowland Hill. who invented the first adhesive postage stamp in 1840, was born.

Hill, an administrator and educator who was knighted in 1860, is primarily known for his development of the modern postal service. He was a champion of social reform

who sought a single postage rate of one penny, paid in advance, for all standard-weight letters. This would make the mail accessible to almost

His brother, Edwin Hill, invented a prototype of the envelope-making machine that folded paper into envelopes quickly enough to match the pace of the growing demand for postage stamps.



The Million-Dollar Tagline

HOW PROS HAVE PERFECTED THIS ESSENTIAL ELEMENT OF THE SALES PITCH IN YOUR SELL-SHEET BY JACK LANDER

TAGLINE is the word, phrase or sentence that attracts a potential buyer's attention and arouses interest in your invention or product. It is the first combination of words a reader will see on your sell-sheet or in your advertisement, often even before his or her eyes are attracted to the photo or drawing.

You have only a second or two to attract attention and a few more to arouse interest. These are the hard-working twins that draw your reader into the sales pitch section of your sell-sheet. Some experts claim the total for both is no more than five to seven seconds, usually fewer.

So, how do the experts in the science aspects of advertising accomplish this crucial feat? By appealing to the emotions of the reader if possible—but in every case appealing to his or her self-interest.

Determine the benefits

Ted Nicholas, author of "How to Form Your Own Corporation Without a Lawyer for Under \$50," sold more than a million copies of that book. He is a multimillionaire from that book alone and has written and published several others. His secret lies in creating a tagline for his ads as the first step before he begins any other effort for a new book, invention, or new product idea.

Nicholas's son, Dave, reveals that his dad actually spends weeks creating several taglines for a single product, reshaping them again and again, and finally selecting the best of the best. Before writing the first draft of the finished tagline, Ted Nicholas begins by determining:

- What are the direct benefits of the product?
- What are the hidden (secondary) benefits of the product?

There's a powerful parallel here for inventors. Ted's principle is simple: If you can't attract buyers to your product, there is no point in pursuing it. And whether your "product" is something tangible or it is the licensing of your patent, people will ultimately have to purchase your invention when it becomes a marketable product.

So, even with a middleman—your licensee, if licensing is your goal—it is essential that you visualize a marketing channel; a customer; the main benefit that customer will derive from your invention when it becomes a product; and its significant secondary benefits.

Including a secondary benefit in the tagline usually makes the tagline too long for a sell-sheet or an ad. I get better results when I create a short, punchy sentence around the single main benefit and place secondary benefits in a series of bulleted statements that follow the main benefit. Most taglines should be a maximum of about 12 words.

Note Ted Nicholas's tagline, which is also the title of his book: It has 11 words, or 12 if you count the a.

Note also that Nicholas didn't even mention the benefits yielded by incorporating; he assumed that was a given. He emphasized forming it yourself—which,



depending on how the reader feels about lawyers, could be of significant benefit. Thus, he squeezed in two benefits: "without a lawyer," and "under \$50"—a very low cost compared with hiring a lawyer to file for you.

In any case, don't assume that a potential licensee will instinctively sense the marketing value of your invention without a convincing sell-sheet: one that is written about the benefits the customer will receive, not the licensee. The licensee already knows that his or her benefit will be profit, assuming that the product sells. And when a potential licensee asks, "Would I buy this?", your sell-sheet must be convincing.

The tagline, of course, is the foundation of your sell-sheet. Ted emphasizes that most inventors or product developers are so exhausted from the work of developing the product that they tend to slack off when it comes to developing their sell-sheet, sales letter, or advertisement.

But a less-than-perfect tagline can lead to failure in the marketplace.

Unorthodox approach

Gerardo Joffe was another very talented advertisement creator. He was one of the country's most successful direct-mail sellers of a variety of products, ranging from a combination microscope and telescope to a postage scale without springs.

Joffe often went to Europe and Japan looking for unusual products that were not sold in the United States. One of his top items was a wind-up shaver. It sold well, but when NASA selected it for the astronauts to use on their round trip to the moon, he got permission to use their logo and renamed the device the "Moon Shaver." He sold 200,000 Moon Shavers at an average price of \$23.95 in seven years.

Joffe preferred to attract attention to his product with unconventional statements rather than taglines, and let the photo or drawing of the producttogether with his intriguing opening words—pull the reader into the sales pitch. In one case, an early hand-held electronic calculator, he simply used the model number, Casio CQ-1, as his headline, along with a hand-drawn illustration.

Direct mail selling has its own peculiarities, and brevity of the tagline equivalent is essential. Still, Joffe has taught us the absolute importance of attracting attention and arousing interest as the first two components of our sell-sheets.

One of Joffe's products was his book, "Make At Least One Million Dollars in the Mail-Order Business." That title is more like the conventional

tagline. Joffe shrewdly squeezed in another eight words in small type, but not as a subtitle.

The first words were the "callout," as the term came to be known. It reads, "Now you too can," which precedes the word "Make." And the other four words, "but probably much more," are between "Dollars" and "In."

Personal experience

Now, bear with me for a bit of nostalgia: Joffe and I partnered on selling my first self-published book. The deal was that he would pay for the \$2,000 ad in the Wall Street Journal and give me a dollar plus the book's cost to print for each book sold. As I recall, we sold about 60 books at \$10 each.

Even the best mail-order experts fail on many probably most—of the items they test. The title of my book was, "How to Get Hired Faster, For More Money, Whether You Are Presently Working or Not." I modeled my title after Ted Nicholas's corporation book mentioned at the beginning of this article.

I met Nicholas at the annual booksellers' convention in Chicago. He was impressed with my book, and that I had modeled my title after his. A week or so after the show, he phoned me and offered to republish it, and I had dreams of making big bucks.

Part of the deal was that I had to research the competition. When I found 17 other books that competed with mine, I knew he would change his mind. I was right.

But a few weeks later he phoned me and asked me to write a book on part-time businesses. I wrote it; he (Enterprise Publishing) published it; and I got the grand sum of \$1,500 upfront, which helped offset the loss of nearly \$5,000 on my "getting hired" book.

The book I wrote for Nicholas, "Make Money by Moonlighting," is still sold on Amazon.com. (I've often mused about what other fate would have awaited me if I had done the same research before investing in writing and publishing my "Get Hired" book.)

In any event, when I caution you about researching your market as a first step and being fanatical about writing great taglines, it is based on being beaten to my knees along the way. Inventing is not recommended for weak people or persons who are certain they will succeed on their first venture. €

Jack Lander, a near legend in the inventing community, has been writing for Inventors Digest for 23 years. His latest book is Marketing Your Invention-A Complete Guide to Licensing, Producing and Selling Your Invention. You can reach him at jack@Inventor-mentor.com.



Getting Started With LinkedIn Ads

PROMOTION PLATFORM LETS YOU TARGET PRECISE DEMOGRAPHICS AND INDUSTRIES BY ELIZABETH BREEDLOVE

AVE YOU considered using LinkedIn Ads to promote your invention? LinkedIn's advertising platform is especially great for marketing products and services designed for use by companies and businesses.

If your invention has a B2B aspect, LinkedIn Ads can help you reach other businesses. You'll be able to reach a very professional audience that you can narrow down by targeting precise demographics and industries. The platform also offers different types of advertising, depending on your objective and more.

Before you begin

Set up a LinkedIn page if you haven't already. You'll also need to think about your campaign objective.

Do you want to raise brand awareness? Gather leads? Make sales? Have an idea of what you hope to accomplish before you get started.

Additionally, get to know the different ad formats available. There are four types: Sponsored Content, Sponsored InMail, Dynamic Content and Text Ads. Take some time to review the specs and guidelines and decide which type will work best for your campaign. Lastly, create a Campaign Manager account.

Starting your campaign

Use these seven steps to set up your first LinkedIn Ads campaign.

- 1. Sign into Campaign Manager, LinkedIn's advertising platform, at linkedin.com/campaignmanager/. This is where you'll create and manage your LinkedIn campaigns.
- **2.** Choose your objective, or the action you hope your audience takes in response to your ads. LinkedIn offers seven objectives: brand awareness, website visits, engagement, video views, lead generation, website conversions and job applicants. You'll choose one of these, depending on whether you want to get awareness, consideration or conversions.

3. Build your target audience by selecting a variety of traits to narrow the audience you'd like to target. You'll choose a language and a location (or locations), then begin to refine your audience by demographic. You can filter by attributes such as company traits, job experience, education level, industries and demographics such as job experience, seniority level and more

Keep in mind that you shouldn't let your audience get too narrow. LinkedIn will give you an estimate of how many people are in your target audience. It recommends having at least 50,000 people in your audience for best results.

Select an ad format from among the four options mentioned earlier in this story: Sponsored Content (single-image ads, carousel ads and video ads), Sponsored InMail (message ads), Text Ads that display along the right rail and top banner on the dashboard and Dynamic Ads.

Which one you choose depends on what copy and visual assets you have to work with, and your goal. For example, if you want to generate leads and you have many great photos to use, you may want to use carousel ads. If you want to increase downloads of content hidden behind an email gate, you may choose Sponsored InMail. If you're hiring and want to attract high-quality candidates, you might choose a Text Ad.

5. Set your daily budget and your bid. LinkedIn lets you set a maximum daily spend, though actual daily spend may be up to 20 percent higher. The minimum daily budget LinkedIn allows is \$20, but you may need to spend more each day to get the results you want

Next, set the dates for your campaign to run. Lastly, you'll want to set a bid. If you aren't sure how much to bid, choose "Automated Bid." If you want more control over how your money is spent, you can set a maximum CPC (cost per click) bid or a maximum CPM (cost per 1,000 impressions) bid.



The four different ad formats are Sponsored Content, Sponsored InMail, Dynamic Content and Text Ads.

If you choose one of these two options, Campaign Manager will suggest a bidding range to help ensure your bid is competitive for your target audience.

- 6. Now you're ready to set up your ads. Best practices vary widely depending on what type of ad you're running, but the Campaign Manager will guide you through it. Refer back to the guidelines and tips LinkedIn provides as you create your ads in order to get the best results.
- **7.** Enter your billing information. The Campaign Manager will walk you through this.

Your ads are ready to be activated! Remember that it takes a few days for the ads to optimize, so it's best to let them run for at least a week before deciding whether they are effective or not.

Best practices

Here are a few other advertising best practices to keep in mind as you build your LinkedIn Ad campaigns for your invention or business.

 Keep your ad copy short! Concise headlines generally lead to more engagement, and you don't want your ad descriptions to get too long or they may get truncated.

- When setting up your audience initially, start by choosing a location and just one or two other criteria. Then, A/B test different audiences, changing just one thing. This will help you narrow in on which audiences perform well and which don't, ensuring you get the best bang for your buck.
- Don't just A/B test your audiences; test your ads, too. Switch out copy and images to see what performs well and what doesn't. Keep refining your ads to find the most success.
- Every couple of weeks, pause the poorest-performing ad and replace it with something new. LinkedIn recommends this practice in order to improve your ad relevance score, which helps you win more bids. Also, you don't want your ads to get stale!
- Make sure you have the LinkedIn Insight Tag installed on your website so that you can track conversions.

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.



Seeing the Light

DUTCH INVENTOR'S GLASSES CAN HELP WITH SEASONAL AFFECTIVE DISORDER, AND MORE BY JEREMY LOSAW

ITH the exception of the holidays, this time of year is often associated with the "winter blues." The shorter day lengths and lack of sun in many parts of the northern hemisphere have a depressing effect on many of us. For some, it is a diagnosable problem that causes deeper problems than fleeting moments of sadness or malaise.

Seasonal Affective Disorder (aptly shortened to SAD) has symptoms such as a change in eating habits, oversleeping and weight gain. Symptoms can be treated effectively with light boxes that reproduce the sun's rays but do not allow for any range of motion.

Dutch inventor Toine Schoutens has developed a portable light therapy system called Propeaq that can help mitigate symptoms of SAD. It can also limit the effects of jet lag and help athletes

How the product works

Propeaq is a portable light therapy system that is built into a pair of glasses. The sunglass-style frames have red and blue LEDs mounted inside them, with interchangeable light blue, dark blue and red lenses.

Wearing the blue lenses with the blue light for about 30 minutes will stimulate your body to be more alert and will provide energy while combating the effects of SAD. The red lenses and LEDs are used for help with falling asleep.

In tandem, the modes can be used to change your sleep patterns to help with jet lag or shift work, and they can help athletes perform at their strongest. The Prepeaq app does not connect to the glasses or control them but helps provide guidance for how

to use the glasses while changing time zones or work schedules.

> The glasses come with a suite of lenses, and the app is free to download.

Helping sports performance

The Propeaq glasses are the result of years of research and the use of light therapy in medicine.

Schoutens, a clinical nurse in Holland for more than a decade, became familiar with light therapy to treat seasonal Seasonal Affective Disorder. He saw firsthand how light exposure could change the mood of his patients. Eventually, this led to a move

to Amsterdam for more rigorous universitysponsored research; he helped develop light therapy technology for tech giant Philips.

During this time, Schoutens also realized that light can have a great effect on athletic performance. At the 2006 Winter Olympics in Torino, he worked with Dutch athletes to provide light therapy. The technology was well received but had some problems.

"We worked with light therapy with boxes in those days," he says. "It was a little clumsy. They are too big and not easy to handle by traveling.

record-holder Victor Campenaerts used Propeag's chronobiotechnology and light glasses to shift his peak biorhythm from 5 p.m. to 11 a.m. This moved the peak power of his body to the time of his worldrecord attempt.

Below: Cycling world

Inset: The red lenses and LEDs are used for help with falling asleep.The frames are stylish and look like real sunglasses.





"In 2007, I made my first light therapy glasses. This went into the fridge, more or less. It was too early (for the technology.)"

The glasses were used by students for research but did not gain wider adoption at the time. It was nearly a decade before the glasses re-emerged.

Golden turning point

It took a call from the Australian national swim team to re-ignite the development of the Propeaq system. The head coach and fellow Dutchman Jacco Verhaeren had been using light therapy with his athletes but disliked the bulkiness of lightboxes. He approached Schoutens, who offered his glasses.

In 2015, he ramped up development and delivered units to the team before the Olympics in Rio. The Aussies used the glasses in the run-up to and at the Games with rousing success: The team won three gold medals.

Patents were filed for the device very early. Because it was important for Schoutens to protect the technology in his home in Europe as well as in other primary markets, he filed patents in the European Union, Canada, Japan and the United States. This gave him a leg up on any competition; his control of the technology has even led to deals with other glasses sellers.

Selling while styling

Schoutens contracted with a Dutch design firm to

finish the development of the product. The style was a key design driver.

"It should look like real sunglasses, because people are used to using (them) instead of outer space-looking frames," he says.

His design firm also helped him find manufacturing partners. The electronics for Propeaq are made in Holland, so the quality can be monitored closely. The plastic components are made in Asia.

After the success of the Rio Games, enthusiasm for the product has continued to grow. Olympians from more than 10 countries have used the product, including U.S. champion triple-jumper Christian Taylor. Propeag glasses have also been used by athletes in other professional sports, such as auto racing.

Schoutens is exploring new applications for Propeaq, primarily in the medical arena. Early testing shows positive results for better sleep habits for sufferers of Parkinson's, Alzheimer's and dementia, and it could also be a good tool for elderly people. ♥

Details: propeaq.com

Jeremy Losaw is a freelance writer and engineering manager for Enventys. He was the 1994 Searles Middle School Geography Bee Champion. He blogs at blog edisonnation.com/category/prototyping/.



The sunglass-style frames have red and blue LEDs mounted inside them, with interchangeable light blue, dark blue and red lenses.

Genius in the Fold

MAN'S SAFE, SPACE-SAVING TOYS ARE THE CULMINATION OF A SERIES OF INVENTIONS BY EDITH G. TOLCHIN



Stories from all over the world. Ori Mishkal recently contacted me from Israel and was excited to share his new product—and inventing experience—with readers.

All parents are safety savvy nowadays, with the ease in researching new products for their children. Here is a new line of space-saving toys that pop up in a matter of seconds and provide hours of safe stimulation for creative young minds.

POPIN Toys' easy foldable design make them ideal for smaller homes and rooms.

Edith G. Tolchin (EGT): Please tell us about your background.

Ori Mishkal (OM): I'm the CEO and founder of POPIN[™] Toys, an experienced industrial designer, and a graduate from Bezalel Academy of Arts and Design in Israel, specializing in the field of folded products. I'm busy designing, manufacturing, bringing products to market and lecturing about cardboard.

EGT: How did POPIN Toys come about?

OM: I have always loved folding stuff and the art of pop-up books. After seeing my family struggling to maintain their living spaces free from their children's toys mainly because of large play structures like play kitchens and playhouses, I knew right there that if I could just make these playsets foldable, it would help my sisters a lot—and probably others with the same dilemma. So, I founded POPIN to address this need.

There are four sets in the initial POPIN lineup: the Pirate Ship Activity Table, Play Kitchen, Mushroom Playhouse and First Step Car.

Each POPIN toy is designed with StrongFold™ technology. Its folding method is based on traditional origami and pop-up artwork. The toys are made for children 2 to 6. Each toy nurtures a different developmental skill, tested by pediatricians and hundreds of children.

The kitchen demonstrates the primary need in nutrition and caring, allowing kids to role-play their grown-up counterparts. In addition, it allows them



"After seeing my family struggling to maintain their living spaces free from their children's toys mainly because of large play structures ... I founded POPIN to address this need."-ORI MISHKAL



to develop their symbolic play skills and creativity. POPIN's car stimulates the child's sense of exploration and gross motor skills, supporting all movement, from crawling and climbing to standing, from first steps and beyond.

POPIN Mushroom Playhouse allows the child to create an area where he or she is in charge. This autonomy enables the child to strengthen self-worth in a constructive and fun manner. POPIN's pirate ship is great for a nice, calm time, for activities that involve concentration like drawing and so on. The pirate ship has two seats, so when the child is ready, he or she can invite a friend to join. It's always important to create a trigger for communication.

EGT: Is this your first invention?

OM: I have invented many foldable products. My work is also my hobby—foldable plastic chairs, a foldable camera bag, cardboard models for kids' science classes, and a cardboard package that converts to a toy playground and more.

EGT: What is unique about POPIN Toys, and why are they different from other cardboard-type toys? OM: POPIN has developed an award-winning, foldable, in-home playground that allows large play structures to fit easily into small apartments. StrongFold™, POPIN's unique folding technology, allows cardboard play structures to carry heavy loads and fold into a flat, easy-to-store unit within seconds.

Several companies tried to find solutions for the toy storage problem and created foldable structures, some of them made of cardboard. The main benefit of POPIN compared to theirs is, first of all, it's durable and rigid. Our products hold up to 50 kg, while competition is much more fragile. Second, our toys open and fold in 20 seconds—no assembly needed—from play mode to storage mode in mere seconds. Competition takes 15 minutes' construction on average.

Finally, we have very low environmental impact. All POPIN playsets are made of 100 percent recycled cardboard and can be fully recycled at the end of their use.

EGT: Where are you manufacturing?

OM: We are currently manufacturing in a factory in China. It is a regular packing and boxing factory, so we quite stand out there.

EGT: Please tell us about your experience with safety standards for children 12 and younger, testing and certifications such as the (USA) Consumer **Product Safety Improvement Act.**

OM: POPIN toys are approved by the Standards Institute of Israel and the European standard for toy safety. The products are also in the process of passing the ASTM F963 standard of the American Standards Institute.

Other than that, POPIN has been tested by pediatricians and hundreds of children, designed by their notes, for them to be safe and satisfied.

EGT: How are the toys packaged and shipped?

OM: POPIN's toys are foldable and packed in slim packages. They can be shipped to customers easily and with low cost.

The shipping and storage advantages of POPIN's folded playsets allow for high margins from selling directly to customers on online platforms. Many times, purchasing a great and fun playset for a child requires going to a specialty (brick and mortar) store. If the customer wants to purchase the playset on an online platform, the shipping costs significantly increase the price.

EGT: What was your experience with patents?

OM: With POPIN, each of the playsets is protected separately by a registered patent. Sub-structures and geometrical locks are also protected by a patent. Our cardboard playgrounds, in addition to their folding quality, remain lightweight themselves and easy to carry. So the method is fully innovative.

INVENTOR **SPOTLIGHT**

The POPIN Mushroom Playhouse allows a child to create an area where he or she is in charge.

EGT: Please share your Kickstarter experience.

OM: In April 2019, we launched an international crowdfunding campaign on Kickstarter. Within five days, we surpassed our \$36,000 funding goal.

This came after we had just secured \$350,000 on ExitValley. That was an amazing feeling! All the hard work of the past year got us recognition, and to see how well the market perceived us brings so much joy!

EGT: Where are you selling?

OM: We sell on our Amazon store in the U.S. (\$49 per toy) and on our website. After we established our online sales via Amazon in 2019, we will present our product in distinguished toy shows and look for regional distribution deals.

EGT: Do you plan to add to your product line?

OM: We have a lot of wonderful useful toys planned among them a castle, a swing and a slide and all made of foldable cardboard, of course. And we are always happy to hear from parents as to what are their needs and what their children's dreams are. We'll try to fulfill them if possible.

EGT: Do you have any guidance for novice inventors who are interested in developing children's toys?

OM: Yes, my best advice would be to think as a child. Try to see the world through their eyes. Even though it's hard to do, it will have accelerated your imagination and creativity, which are extremely important in the field of toys. Keep the fun fantasy part during the work.

Details: popintoys.com

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



Critical Steps to getting your NEW PRODUCT "out there"

7 GET IT MADE

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

2 GET A WEBSITE!

Contact Ken Robinson - While your order is being manufactured, you need to start working on your WEB PRESENCE! Get people talking about your product on Social Media (Facebook, Twitter, YouTube, Google+), get good search engine placement (SEO)!

www.EGTglobaltrading.com

EGT@egtglobaltrading.com P.O. Box 5660 - Hillsborough, NJ 08844 845-321-2362

www.widgetsontheweb.com

kenrbnsn@widgetsontheweb.com 614 Van Liew Court - Hillsborough, NJ 08844 908-963-2447

Get more BANG for your BUCK from two professionals with a combined total of over 60 years of experience!

Climb Charts

Since 1985, **Inventors Digest** has been the world's most consistent and trusted friend to the independent inventor.

No. 1 in inventor resources.

No. 1 in education.

No. 1 in inventor news.

No. 1 in inspirational and entertaining stories.

No. 1 in the most innovative and useful products.

We have always been a labor of love, depending on the financial support of benefactors who are as invested in the future of inventing as we are.

Please consider a sponsorship at one of the following levels:

STEP 01

PLATINUM \$4,000 or more a month

STEP 01

STEP 02

GOLD \$3,000 or more a month STEP 02

STEP 03

\$1,500 a month

STEP 03

Your sponsorship comes with attractive advertising opportunities in the magazine and at inventorsdigest.com, as well as other possible perks.

PLATINUM SPONSORS





GOLD SPONSOR



Subscribers: Pledge \$50, \$100, \$250, \$500, or \$1,000 a year to help support the world's longest-running magazine devoted specifically to inventors and inventing. We'll include a mention of your name or the name of your organization each time we run this notice, and at **inventorsdigest.com**. Thank you for helping to keep alive the spirit of innovation.

For more information, call 704-333-5335 or email info@inventorsdigest.com.

ANIMATION NSPIRATIO TRADEMARKED PRODUCTION PROCESS ENCOURAGES READING, WRITING FOR AT-RISK KIDS 22 INVENTORS DIGEST INVENTORSDIGEST.COM



After the partners spoke, the "WonderGrove Wizard of Oz," a collaboration of 24 schools across the United States, flickered onto the screen. As it rolled, various sections of the audience exploded into squeals of delight when their schools were recognized. They heard their own voices, saw their drawings, animation moves and witnessed—on the big screen—something that bonded them into a tight-knit community of storytellers.

This fraternity of kids, those who often don't know how to express themselves, might not be doing so well with traditional classroom curriculum. But they are flourishing with this tool, used in 172 school districts in 24 states.

Governors, educators and STEM centers throughout the United States are jostling to find funds to get Story Maker into their schools because of the profound effect it's having on student reading and writing skills. Students are learning to collaborate and complete authentic filmmaking tasks as a classroom antidote to the enormous amount of free time they spend on electronic devices outside of school.

Pivotal influencers

Los Angeles-based Wonder Media—which says it offers "the best edutainment solutions for children"—is building a global team of storytellers to connect with children at risk. The company uses animated stories to address teen suicide, hunger, sex abuse prevention, emergency preparedness, social emotional learning, critical thinking, autism, nutrition, children with disabilities and those living in a home with an addicted adult.

At a time when the word influencer has become a hair-brained notion of self-celebrity, Thoren and Cannon have compelling influence under their wings: The Institute for Habits of Mind, the Betty Ford Center Children's Program, the Hero in You Foundation, and Girl Scouts and Boy Scouts USA.

The Barbara Sinatra Children's Center is also included; its animated lessons to teach sexual abuse prevention have been viewed by more than 150 million students worldwide. The lessons have been adopted by Education for Justice, an initiative of the United Nations; and The Boys Scouts of America,





Accomplished TV veterans Terry Thoren and Ryan Cannon are using their talents to turn the magic of animation into a powerful Education Technology tool.

to name a few of the prestigious global partners. The Sinatra center's "Protect Yourself Rules" educational videos and lessons plans are now required viewing for every Cub Scout in the world!

A greater purpose

This bountiful marriage of animation and education began when Thoren walked away from the red carpets of the entertainment industry to dedicate his life to a more meaningful purpose. One of his first projects was the application of animation for children with autism.

He underscores the importance of animation as an EdTech tool by explaining: "We discovered long ago how animation is a powerful teaching tool for young children.

TERRY THOREN

Occupation: CEO, Wonder Media, LLC

Home: Snohomish, Washington, and Sherman Oaks, California

Family: Wife, three sons

Favorite invention: iPhone

Favorite cartoon show: Every Tex Avery cartoon produced in the "Termite Terrace" bungalows on

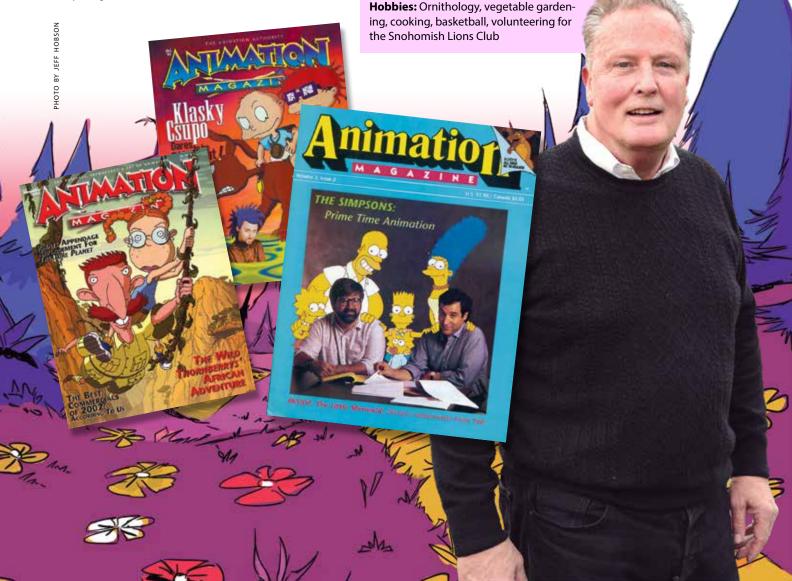
the Warner Bros Studio Lot

Favorite book: "Coach Wooden's Pyramid of

Success Playbook," by John Wooden

Favorite movie: "Gandhi"

Terry Thoren created Animation magazine in his living room 32 years ago to change the stereotype that animation is just "cartoons for kids." His vision that animation was an art form to be appreciated by all ages became a reality. The magazine is the only global publication that promotes animation in all of its manifestations.





Wonder Media uses animated stories to teach children critical thinking and help prevent suicide, sex abuse, hunger, and trauma that can result from a lack of emergency preparedness.

Left: Ryan Cannon directs the design for animated Dorothy's Oz costume.

Center: Students create animated stories with Wonder Media Story Maker.®

Right: Cannon directs a story session with producers Amanda Carson and Sandra Brace. are real. As such, they form an emotional bond with animated characters and will mimic their behavior.

that animated characters

"Research shows that lessons taught to children by an animated character are retained 80 percent more than a lesson delivered by an adult."

As often happens with the best ideas, Story Maker in schools happened by accident. Thoren said that after a school superintendent from Columbus, Mississippi, visited the Wonder Media studio, the school began experimenting with implementing an animation studio back home. The superintendent discovered that teaching at-risk students to make animated stories had a profound effect on their reading and writing skills, and dramatically decreased absenteeism.

Productive pairing

People tend to say that Thoren is the brains of the company, Cannon the heart.

The film-loving Cannon was a childhood fan of "Star Wars," "Batman" and "Rugrats." He was overwhelmed by the emotion that Pixar was able to express through the first

piece of digital computer animation called Luxor, Jr.

The father of two young daughters notes: "If you think about the stories that have been burned into your memory, they are full of strong emotions. Memory is directly tied to intense feelings, which is why I infuse each project I work on with both humor and heart—two strong, positive sensations."

Cannon is inspired working with Thoren. The two are on a mission to effect change.

With more than 100 million views of their WonderGrove lessons on YouTube and on their subscription website, they are building a legacy around the idea of providing social-emotional learning and critical thinking skills to children before third grade.

Cannon says that creating true change is a formula: "care + confidence + contributions = change."

"When kids care about a cause, are confident they can do something about it and are given a chance to contribute, change is bound to happen. Children are our future, so it's fitting that Story Maker shows them how to start affecting their future now by teaching communication, teamwork and compromise."

Cannon speaks of Thoren as a "gardener for good" as they spend each day planting seeds of hope for a better future for children





"Research shows that lessons taught to children by an animated character are retained 80 percent more than a lesson delivered by an adult." - TERRY THOREN

Invention inspiration

When asked the standard but compelling question, "If you could invite anyone to dinner, who would it be?", Thoren unequivocally says: the late John Wooden, legendary coach of the UCLA men's basketball team. Wooden's Pyramid of Success is a roadmap for excellence that he has followed religiously throughout his life.

The son of a hard-nosed, ultra-conservative father who was a Cornell Hall of Fame baseball coach. Thoren says he was tossed out of the family home at age 16. Feeling discouraged as a "free thinker" laid the foundation for who he is today. For 40 years, he has pushed the boundaries of animation, continually innovating its use to bring positive change on a large scale.

Thoren is tenacity to the 10th power. Unlike the not-so-healthy family experience he had, he rates the time with his three grown and incredibly adventuresome sons at the top of his list of happiness factors.

He makes the cozy town of Snohomish, Washington, his home, where he and his wife have

nurtured a storybook farm into existence. He commutes to Los Angeles and steers the Wonder Media ship with staggering vigor, his ideas fueled by the grandeur of the Northwest.

Cannon is an Angeleno, where he and his wife are raising their daughters amid the hustle and bustle of the big city. As a father trying to guide and protect his family in today's world, he strives to equip families everywhere with better tools to combat the potential issues before us.

Together, the dynamic duo are fueling the intellect and hearts of youths everywhere, keen to pierce the veil of trauma that any child might experience—via a safety net of age-appropriate animated stories.

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



When students fall in love with animated Chris, one of the lead characters in Wonder-GroveLearn.net, they emulate his appropriate classroom behavior.



RYAN CANNON

Occupation: Creative director,

Wonder Media, LLC

Home: Sherman Oaks, California

Family: Wife, two daughters

Favorite invention:

Non-linear editing software

Favorite cartoon show:

"Batman: The Animated Series"

Favorite book: "The Lord of the Rings,"

by J.R.R. Tolkien

Favorite movie:

"Toy Story" 1, 2, and 3 combined

Hobbies: Writing poetry, hiking, cycling,

storytelling, Dad jokes



IPOEF INVENTOR OF THE YEAR

CHIEKO ASAKAWA'S TECHNOLOGIES CREATE ACCESSIBILITY FOR BLIND PEOPLE

linded by a swimming pool accident at 14, Chieko Asakawa still swims, skis, skates, scuba dives, rock climbs.

But there will always be some limitations for her. When she gave a TED Talk in December 2015, she had to be helped onstage.

She recalled that after her accident, her brothers had to read for her. "I really wanted to be freed from relying on someone. ... in the mid-1980s, I got to know cutting-edge technologies, and I thought to myself, 'How come there is no computer technology to create books in Braille?"

Her inventing journey began.

Asakawa's digital Braille work in the '80s has helped blind people in Japan access digital Braille books. Her further achievements for the visually impaired, aided by technological advances, has earned her the Intellectual Property Owners Educational Foundation's 46th Inventor of the Year award.

In 1997, her work on the IBM Home Page Reader resulted in a voice control system to navigate the internet that was available in Japan and throughout Asia; the United States, and Europe.

From that flowed a number of spin-off technologies developed by Asakawa and her team: a disability simulator called aDesigner that helps Web designers identify potential design issues; aiBrowser, which helps visually impaired users access streaming video, animation and other visual online content, and Accessibility Tools Framework, which offers standardized design and application programming interfaces that allow developers to create accessibility tools and applications easily and cost effectively. According to IBM, the contribution of these technologies and the framework A "Kindle for the blind" and an interactive app to help children learn to read Braille are co-winners of the National Braille Press's Touch of Genius Prize for Innovation.

The Canute is a 360-cell braille display with nine rows of 40 cells developed by Bristol Braille Technology in the UK. It will be the first affordable multi-line display on the market. The Canute is targeted for education settings and libraries—and eventually math, science, coding and music.

Braille Sheets is an interactive app developed by ObjectiveEd. The app makes it easy to enter programs/lessons for students, see lessons from other teachers, and pair with an actual Braille sheet where students tactile-y learn letters and words as they get real-time audio feedback.

January 10 is the deadline to apply for next year's \$10,000 award.

Details: touchofgeniusprize.org; tmcbride@nbp.org



to the open source community, Eclipse Foundation, have helped stimulate accessibility software innovation. In 2008, Asakawa pioneered the Social Accessibility project. Based on collaboration software developed by her team, it creates an open, collaborative environment in which blind users, developers and sighted "supporters" work together to solve reallife Web accessibility issues raised by blind users.

In 2010, she initiated an Open Collaboration Research project to explore ways to design a multimodal interface on mobile devices for use by elderly, semiliterate or illiterate people and those with limited or no access to information technology, Since 2011, she

and her team have been working with

the University of Tokyo on a project called Senior Cloud to innovate an information communication technology platform for the millions of senior citizens in Japan.

Asakawa will be honored at the IPO Education Foundation's 12th annual awards dinner, December 12 at the National Building Museum in Washington, D.C.







U.S. JAMES DYSON AWARD

AFTER SUFFERING EPILEPTIC SEIZURES IN PUBLIC, UMA SMITH INVENTS A PORTABLE SAFE SPACE

he was having seizures in public and was horrified.

For other people.

Uma Smith was diagnosed with epilepsy at age 11. She has been hospitalized four times for seizures three of which happened away from home and caregivers. Bystanders were helpless and panicked.

Keenly aware that there are more than 50 million people with epilepsy worldwide, she designed Cocoon, an anti-suffocation pillow combined with technology that alerts a caregiver and ambulance when someone opens the device and begins using it. Cocoon also has written instructions for bystanders that informs them what to do when a person has a seizure.

The 23-year-old recent graduate of Pratt Institute in Brooklyn, New York, is the 2019 American national winner of the James Dyson Award. She hopes to launch her design in the future. Cocoon is patent pending.

"There are products on the market that deal with epilepsy," she says, "but there really should be something better. A lot of these products that are head gear and this kind of stuff, you don't necessarily want to be like, 'Oh, I need that,' because it's just informing you more about your disability."

Here's how Cocoon works: When an epileptic person experiences an aura at the start of a seizure, he or she opens the product and lies on one side. The person then slips Cocoon over the top of his or her head, leaving the face unobstructed.

Magnetic sensors detect when the device has been opened and alerts pre-designated caretakers of the epileptic person's GPS coordinates. An accelerometer detects convulsions while a cell-connected chip calls an ambulance if the seizure lasts more than 5 minutes.

Smith went through 40 prototypes, calling the process frustrating but eventually highly rewarding. "I broke them down into three categories: the head support, the portability, and also the information.

"For the portability, I messed around with some origami, with inflation, with spring steel. Eventually the thing that seemed the most reliable was folding. And it just kind of pops out in seconds to become a safe space."

Smith says that at one point she considered having the device talk, "but I realized that graphics and writing was a lot more reliable."

Cocoon is an antisuffocation pillow combined with technology that alerts a caregiver and ambulance when someone opens the device and begins using it. Cocoon also has written instructions for bystanders.



INTERNATIONAL JAMES DYSON AWARD LUCY HUGHES HARNESSES FISH WASTE TO CREATE

A UNIQUE ALTERNATIVE TO PLASTIC

ucy Hughes is \$35,000 richer, thanks to her ingenious use of fish waste.

✓ The 24-year-old student from Twickenham who attends the University of Sussex is the winner of the 15th annual international James Dyson Award. Her invention—a unique plastic alternative called Marina-Tex—solves two problems: the ubiquity of single-use plastic (which is often inappropriately used) and massive fish waste from the fish processing industry.

Hughes studied product design and developed MarinaTex as her final-year project. Through extensive research, she found that fish skins and scales were the most promising materials to form the basis of a bioplastic, because they contain strong and flexible protein structures.

In order to allow these proteins to attach to one another to create a new material, she set about finding an organic binder. Determined to keep the solution local in order to reduce transportation, she looked to the coastline on her doorstep, experimenting with different organic marine binders before settling on agar.

Agar is obtained from the cell walls of some species of red algae. It is formed of agarose and agaropectin. The agarose is the gelling agent; its structure is very good at trapping water molecules and acting as a

Hughes conducted more than 100 different experiments-mostly on the kitchen stove-to refine the material and process. She finally created a consistent and plastic-like material that was biodegradable and translucent, MarinaTex.

With the prize money, Hughes aims to commercialize her invention sustainably and conduct further research into how MarinaTex can become a global answer to the abundance of plastic waste.

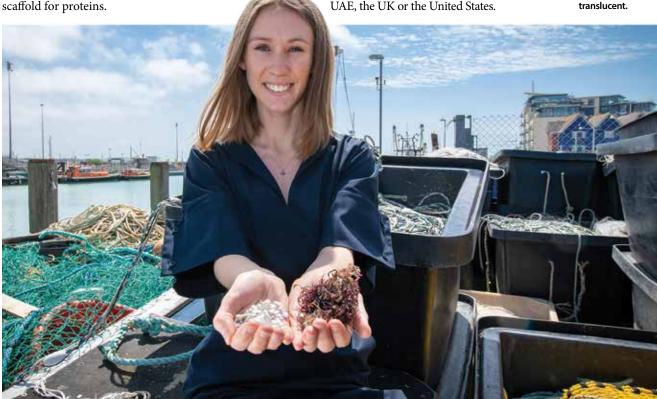
"MarinaTex represents a commitment to material innovation and selection by incorporating sustainable, local and circular values into design," she says.

This year, the international James Dyson Award had the highest number of female entrants in the competition's history across all 27 participating nations. Unlike other competitions, participants are given full autonomy over their intellectual property.

The award is open to any university-level student of product design, industrial design or engineering, or graduate student within four years of graduation, who is studying or studied in Australia, Austria, Belgium, Canada, China, France, Germany, Hong Kong, India, Italy, Ireland, Japan, Malaysia, Mexico, the Netherlands, New Zealand, the Philippines, Russia, Singapore, Spain,

South Korea, Switzerland, Sweden, Taiwan, the UAE, the UK or the United States.

It took Lucy Hughes more than 100 different experiments—mostly on the kitchen stoveto create MarinaTex, a consistent and plasticlike material that is biodegradable and translucent.





COLLEGIATE INVENTORS WINNERS

Conservation and efficiency are dominant themes for winners in the 2019 Collegiate Inventors Competition.

Among the four winning entries are a new class of more efficient transmission; a process that reuses water from power plants' cooling towers; and an adapter for eyedrop medication bottles that reduces waste and cost.

The annual competition for college and university students and their faculty advisers is a program of the National Inventors Hall of Fame.

Five undergraduate and five graduate teams, consisting of 23 students from 11 colleges and universities across the United States, received an all-expenses-paid trip to the final round of the competition at the United States Patent and Trademark Office's Madison Building in Alexandria, Virginia. The teams presented their inventions to a panel of final-round judges that included hall of fame inductees and USPTO officials.

Winners (\$15,000 prize):

Undergraduate—PE-IVT (Positively **Engaged, Infinitely Variable** Transmission Using Split Helical Gears), by University of Nebraska-Lincoln team member Ethan R. Brush (adviser, Carl Nelson). As demand for electric vehicles rises, so does the need for manufacturers to identify a more suitable transmission. The PE-IVT represents a new class of transmission that combines the torque of gear-based transmissions with the efficiency of continuously variable transmissions. It operates at 88 percent to 98 percent efficiency across all gear ratios. It could disrupt existing technologies and reduce energy losses across a range of applications and industries.

Graduate—Infinite Cooling, by the Massachusetts Institute of Technology team of Maher Damak and Karim Khalil (adviser, Kripa Varanasi). Freshwater sources are in high demand as regions fall into drought, and 39 percent of all freshwater withdrawals in the

Winners of the 2019 Collegiate Inventors Competition include (top photo, top row left to right) Maher Damak; Karim Khalil; (bottom row) Eugene Oh; Sarah Lee; (bottom photo, top row) Ethan Brush; (bottom row left to right) Tejasvi Desai; Allisa Song; Mackenzie Andrews.

United States are attributed to power plants. Infinite Cooling can ionize and collect water from power plants' cooling towers to be reused as industrial and drinking water. If this invention was used in all power plants across the country, it could save as much as 200 billion gallons of water per year.

Runners-up (\$5,000 prize): Undergraduate— PeritoneX, by the Johns Hopkins University team of Tejasvi Desai, Sarah Lee, Eugene Oh and James Qin (adviser, Elizabeth Logsdon). End-stage renal disease can be fatal. With the limited availability

> of kidney transplants, hundreds of thousands of people require renal replacement therapy to survive. Peritoneal dialysis (PD), a convenient, at-home form of this therapy, carries a high risk of infection. The PeritoneX syringe-based mechanism is designed to reduce this risk by disinfecting PD systems, and without increasing the time or dexterity required to perform PD. The PeritoneX team also received the Arrow Electronics People's Choice Award (\$1,500 prize).

Graduate—Nanodropper, by the Mayo Clinic Alix School of Medicine/University of Washington team of Mackenzie Andrews, Allisa J. Song and Jennifer Steger (adviser, Raghu Mudumbai). For millions of people with eye conditions such as

glaucoma, the unregulated size of eyedropper tip openings poses significant problems. Oversized drops dispensed from these bottles result in wasted medication, leading many to run out before their insurance covers a refill. Each missed dose can contribute to vision loss. Nanodropper is a universal adapter for eyedrop medication bottles that creates smaller and more efficacious droplets to reduce waste, decrease per-dose costs, and ultimately increase access to expensive, essential medications.



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



10K+ HOURS OF FILM PRODUCED

150+ PROTOTYPES MADE





OVER \$200MM SALES WORLDWIDE

500+ HOURS SPENT ON PRODUCTION OF EACH CAMPAIGN





25% HIGHER SUCCESS RATE

50+ RETAILERS STOCKING OUR PRODUCTS WORLDWIDE



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



Recently successful brands

















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



Equity Crowdfunding

RECENT CAPITAL-RAISING OPTION MAY BE A BETTER FIT FOR SOME INVENTORS BY HOWIE BUSCH

■ HERE ARE so many ways to get your product to market. In this space, we've talked about some of the most common methods:

- · Licensing to another brand/manufacturer in exchange for royalties.
- · Manufacturing by yourself.
- · Crowdfunding on platforms such as Kickstarter or Indiegogo.

But there's another option that's a little newer, and intriguing: equity-based crowdfunding.

Traditional crowdfunding campaigns are generally for consumer products and/or creative endeavors, such as funding a movie or a music CD. With consumer products, you "back" a project, which means that you are pre-ordering the product.

This enables the inventor/campaign creator to do two things: assess whether the market is interested in the product; and go to a manufacturer with an actual order in hand, as opposed to ordering several thousand units and hoping people will buy.

As an example, I launched DudeRobe with a Kickstarter campaign. Backers supported the campaign with a pledge or a pre-order (the robe cost \$74) and with all of those pledges/pre-orders, I manufactured the product. They would receive the product a few months later, making their pledge more of a pre-order for the product.

With nearly \$80,000 in pledges/pre-orders (from Kickstarter & Indiegogo), I knew there was a market for the product. As important, I was able to go to the manufacturer with a real order in hand rather than placing an order for 5,000 units and hoping I could sell it.

So, the traditional crowdfunding route enabled me to de-risk my path to market for my invention—as it does for so many inventors.

Different mechanics

The main difference between traditional and equity crowdfunding is that in equity crowdfunding, an equity stake (stock shares, convertible note, etc.) in the company is offered in exchange for a pledge or investment.

Although some companies choose to offer their product as an enticement, the goal is to raise money to operate and/or expand the company, as opposed solely to manufacture the product to fulfill the orders from backers.

In equity crowdfunding, proceeds can be used for inventory, marketing, hiring employees, as well as to develop and manufacture a product. In traditional crowdfunding, the money must go to manufacture the product to give the backer the benefit of his or her bargain for the pre-ordered product.

Equity crowdfunding came into existence in 2016 with the JOBS Act. The acronym derives from Jumpstart Our Business Start-ups. It expanded options for entrepreneurs to seek out everyday (non-accredited) investors to raise capital and grow their companies via online crowdfunding platforms.

By opening equity crowdfunding to non-accredited investors, the JOBS Act gave small businesses and early-stage start-ups an alternative method of raising early capital, adding to other, more traditional early capital-raising options. These include bootstrapping, friends and family, angel investors and small business loans.

In equity crowdfunding, an equity stake (stock shares, convertible note, etc.) in the company is offered in exchange for a pledge or investment.

Traditional crowdfunding is great for consumerfacing products. But what if your invention or innovation is more of a business-to-business play, or a software?

In that case, going the traditional crowdfunding route may not make sense, and equity crowdfunding might be the right route.

But remember, there are plenty of similarities. In fact, if you look at any of the big equity crowdfunding platforms, they look very similar to Kickstarter and Indiegogo. The three biggest platforms are StartEngine, WeFunder and SeedInvest.

How to succeed

The most successful equity crowdfunding campaigns do a good job with:

- Narrative/Storytelling. Whatever your product or company is about, make it compelling.
- **Assets.** Be sure to put together a great video with great pictures so that your campaign page does a great job of selling your product, service and you.
- Management/Founder Background. Are you the best person to run the company? If so, why? If not, who can you add to the team who will give an investor confidence?
- Financials (including revenues and valuation). If you have a good financial story to share, great but maybe you're pre-revenue or don't have great sales. If that's true, make sure the other elements are really good.
- Bringing People to the Party. Much like traditional crowdfunding, you can't just put a campaign

together and expect people to invest. You have to get your friends, family and colleagues to invest early to give you some momentum so that others take notice.

Nail these crucial areas, and you stand a very good chance of raising the capital you seek.

One of the most underrated advantages of equity crowdfunding is that investors, in addition to providing needed capital, can become an army of brand ambassadors. After all, with a stake in your company, they will be more likely to share your company with their friends, family and colleagues—not to mention that they're more inclined to keep buying from you (assuming you're a consumer product)

And if you are an inventor reading this, keep in mind that it's always good to support other inventors and innovators. If you think an inventor/product developer has a cool product that you could use, or he or she has a cool business model and you think the company will succeed, why not give support?

After all, when you launch your product, whether on Amazon, Kickstarter, Indiegogo or one of the equity crowdfunding platforms listed here, aren't you going to want the inventor community to support you?

Howie Busch is an inventor, entrepreneur and attorney who helps people get products to market through licensing, manufacturing or crowdfunding. Possibly the world's least handy inventor, he has licensed many products, run a successful Kickstarter campaign and appeared on "Shark Tank."







Maxing out **CES**

TIPS FOR EXHIBITORS, MEDIA AND INDUSTRY ATTENDEES
AT JANUARY'S WORLD ELECTRONICS SHOWCASE BY JEREMY LOSAW

F YOU ARE connected to the electronics industry and attending the 2020 Consumer Electronics Show, you will experience one of the world's biggest trade shows and a "must attend."

The January 7-10 event (not open to the general public or anyone younger than 18) is non-stop, day-and-night action in and outside of the show venues. The time flies, so you should be prepared in order to get the most out of your time and expense to attend.

I have been fortunate to be part of CES as an exhibitor, media member and industry attendee. No matter your role or goal for the show, these tips will help you get the most from the experience.

Exhibitors

The two things every exhibitor needs for a great show are a clean booth design and a working product or prototype.

If you are a start-up and have never exhibited at CES, you will most likely end up in the Eureka Park area for new companies. Each booth space is 10-by-10 feet, so everyone has the same space.

You should have a well-designed booth to complement your product and prove how serious you are. At minimum, you need a banner to display your brand

to hang in the booth—but depending on the nature of your product, you may need a much more immersive experience than just a podium in front of a wall. You are allowed to have a test track, furniture, or other elements that complement your device in the best way possible.

With so many attendees and media coming by your booth, the world is going to see your prototype or product. It must be the best version yet. In addition to booth visits, there are other events such as "Shark Tank" auditions and meetings with potential partners. These instances require a product demo, so you only have one opportunity for this to go well.

(That said, you probably won't give nearly the amount of live demos at the booth that you may think. Most visitors have a jam-packed schedule and will be at the booth for 30 seconds or less. They will rarely want a full demo.)

Make sure you have multiple devices, spare batteries or any other parts and pieces that may be prone to failure so that each demo you run will go flawlessly.

If the prototype breaks, try not to fix it at the booth. Keep smiling and taking business cards until you can work on it behind the scenes, either on site or not. The relationships you build at CES are more important.

Below: At a recent CES show, the Parkki booth had a great demonstration of smart parking technology that included a model city. Brooke Predmest from Beyond Zero gave a live demo of the company's cooling device. Not every booth guest will want a full demonstration.



The show is all about marketing your new product, so you need great materials to support your business.

Many people will have their hands full and may not have bags, so full 8.5" x 11" sales sheets may not make it home. Keep your material to postcard size or smaller.

It also helps to have giveaway swag such as pens and stickers. I love a good sticker and will find somewhere to put it when I get home, which prolongs exposure to your brand. Other knicknacks are good, too.

Do not skimp on creature comforts. Make sure you have water and snacks at your booth. You are going to be on your feet all day and will have little time to break for food.

Media members

Whether you are a writer, photographer or vlogger, CES offers free passes to qualified members of the media. You must apply at least a few weeks before the show and prove that you have a legitimate platform, but the threshold for entry is not as stringent as you may think.

Covering the show can be a grind. Not only are there four days of actual show coverage, the days before the floor opens are filled with press-only events and panel discussions. These can be very informative and can help you be at the forefront of all the show has to offer.

When you get there, find the media center. Coffee, tea, food, WiFi and a swag bag are a few of the niceties. You also have the chance to hobnob with others in your field and get helpful tips.

You will probably have to play a little defense when walking the floor with a media pass. Every exhibitor wants to spread the word about his or her product and will go to great lengths to chat you up for a potential media placement.

You can lose valuable time if you are too giving. Politely decline the overzealous PR reps and stay focused on the topics and areas of the show that interest you most.

If you find a company that you want to interview in greater depth, ask to make an appointment in the early or later hours of the show when it is less crowded so you can have full attention. Besides taking pictures of the booths and products you want to feature, photograph the badges of people with whom you talk. It can be a lifesaver to have these reference photos once you get write the story.



Attendees must have a goal in mind and an industry of interest, and use company apps and websites to map out key booths.

Industry attendees

This may be the most challenging way to do the show. You are not encumbered by having a booth to monitor, but you need a good plan and must stay focused to ensure you get the most from your time.

If you are not careful, you can waste four days testing out every VR headset and massage chair and not make any great connections.

Have a goal in mind and an industry you are interested in, and use company apps and websites to map out key booths. It also helps to contact these companies before the show and set up an appointment to ensure you meet the right contacts face to face.

Once your main business is sorted out, enjoy the bounty of cool tech on display. The big company booths with the VR racing simulators and walls of high-def displays are often less crowded early or late in the day.

CES is talked about by the electronics industry and the world for months afterward. No matter how prepared you are, it will be overwhelming and tiring (and you will surely hit your 10,000 steps before lunch each day).

However, if you keep these tips in mind and stay focused, you will make many great connections, learn new trends in your categories of interest, and still have time to drool over the walls of high-def TVs. €



Active Times

E RECENTLY SAW a busy few weeks on the IP

2 RECENT DEVELOPMENTS COULD ADD TO INCREASE IN PATENT VALUATIONS BY LOUIS CARBONNEAU

scene, with some surprising news. First, the U.S. Court of Appeals for the Federal Circuit issued a rather unexpected ruling that the appointment of several Patent Trial and Appeal Board judges was unconstitutional—refusing to take its cue from the U.S. Supreme Court, which made sure to steer clear of this issue when confronted by similar questions. Although the federal circuit went to great lengths to emphasize that its decision was narrow and not retroactive as to past decisions, it created some uncertainty as to how the United States Patent and Trademark Office will react to comply and whether inter partes reviews (trials at the PTAB to determine patentability) are here to stay or not.

On November 6, a U.S. jury returned a verdict against Wells Fargo for \$200 million relating to a United Services Automobile Association lawsuit alleging infringement of a patent pertaining to mobile check deposits, with the possibility of seeing these damages enhanced on the basis of willful infringement. Hours later, Wells Fargo filed no fewer than six IPR challenges before the PTAB.

We often explain that two factors keeping patent valuations low in past years were: 1) damage done by the PTAB through its IPR "kill" rate, and 2) the relative scarcity of larger court awards that make the headlines and get the attention of the boardrooms, even if they are later overturned or reduced.

We believe that these two apparently unrelated developments are symbiotic to some degree and could further accelerate the recent increase in patent valuations, which we discussed in the November 2019 Inventors Digest.

Again, for those who need their daily dose of news, please follow me on LinkedIn or Twitter for more regular updates.

Buyers and sellers

The LOT network is an interesting animal that is essentially a poisoned pill for non-practicing entities (NPEs), and it has had a lot of success in drumming up a large number of members. (Editor's note: A

non-practicing entity is someone or some company holding a patent for a product or process but with no intention of developing it.) Those will be rewarded by soon gaining access to 1,700 Symantec patents that LOT member **Broadcom** is set to inherit once its acquisition of the company is completed. ...

On the other hand, Semiconductor company Cypress is not waiting for its own acquisition by **Infineon** to divest more of its patent portfolio to NPE Longitude licensing, to which it had sold a large set of patents in 2017. ...

Of great interest for those who are trying to get a sense of what is available for sale at any given point, NPE buster Unified Patents announced the launch of a Patent Transaction Portal where you can view all portfolios for sale (or likely sold), based on aggregating data from various sources. It will be interesting to see how comprehensive it is and whether it remains up-to-date (it seems limited to a patent-by-patent list in its first iteration). But anything that helps bring more transparency over patent transactions is definitely welcome. ...

On a related note, defensive aggregator **RPX** recently reported a resurgence of cash-rich patent litigation funding entities. This should boost the rate of transactions because owners whose patents are infringed can now more easily enforce those, providing a greater incentive for infringers to acquire/license rather than litigate against a much stronger opponent.

Winners and losers

The biggest loser was indeed Wells Fargo, per the announcement above. Another was 10x Genomics, which agreed to pay **Becton Dickinson** \$25 million to settle a patent infringement lawsuit over molecular barcoding and single cell analysis technology. The parties also entered into a broad cross-patent licensing agreement....

Fortress on its side hit a snag when Intel decided to take the offensive after being on the receiving end of several lawsuits and filed a complaint under antitrust law, accusing the investment firm of stifling competition through the acquisition and "endless, meritless



The seemingly unrelated ruling on PTAB judges and the verdict against Wells Fargo may be symbiotic to some degree.

litigation" of "weak patents." Fortress's allegedly anticompetitive aggregation scheme imposes "a tax on the electronics industry that increases prices, decreases output, and ultimately harms consumers," Intel said. ...

Pictometry International, which had successfully sued Verisk and XactWare for patent infringement around aerial imagery technology and secured an award of \$125 million last year, has also obtained a permanent injunction from the court, barring its competitors from selling infringing products for the remaining life of the patents in dispute.

From the bench

The U.S. Eastern District of Texas has historically been a pro-patentee fiefdom and a favorite of patent owners. This time, though, the court issued a decision that should make defendants happy by stating that simply ignoring patents (i.e. "willful blindness") does NOT amount to the threshold of "willful infringement" required under the Patent Act to warrant enhanced damages.

On the legislative front

The U.S. Senate Judiciary Committee's Subcommittee on Intellectual Property, led by Sen. Thom Tillis (R-N.C.), continued hearings recently on ways to improve patent quality at the USPTO. Although

Tillis acknowledged that "many good, high-quality patents are being improperly invalidated under Section 101"—alluding to the "madness" of the recent Chamberlain decision in which a garage door opener was found abstract—he said that poor quality is still an issue that needs to be addressed. As IPWatchdog has noted in previous articles:

- "In the past five years, 781 unique patents have been held invalid in whole or in part by the federal courts. Compared with the five years prior to Alice (the landmark 2014 U.S. Supreme Court ruling), there has been a 1056 percent increase in the number of decisions finding ineligible claims and a 914 percent increase in the number of invalidated patents;" and
- District courts are invalidating claims on patent ineligibility grounds at a rate of more than 60 percent, with the federal circuit affirming 90 percent of the time.

In parallel, a bipartisan bill to require patent transparency in an effort to bring down the cost of prescription drugs has been introduced in the House of Representatives. The bill is a piece of companion legislation to one introduced in the Senate in March.

The Biologic Patent Transparency Act aims to end patenting practices that make it difficult for biosimilars to enter the market by increasing transparency in the prescription drug market and promoting



HANDSHAKES

Certainly the big news lately was the announcement of a patent truce between the two large Taiwanese semiconductor giants, TSMC and GlobalFoundries, which settled all current litigation and entered into a broad cross-licensing agreement. It will be interesting to see whether this will have a domino effect on other chip set companies and how they approach their patent monetization strategy going forward. ...

Also on a rather large scale, Swedish Ericsson and Chinese Xiaomi settled their difference in a lawsuit in India that dated to 2014, and Xiaomi finally accepted to license Ericsson's SEP patents in India. We will see if the same pattern will take place in other countries where the two could also clash.

> competition. The act would require companies to publicly disclose the patents that protect their originator biologics, making it easier for competitors to evaluate and plan for the development of biosimilars.

Around the world

Recent statistics show that although 93 percent of successful patent plaintiffs so far have only received statutory damages under the Chinese system, this

is about to change. Chinese courts are making it easier to prove actual damages and China has recently introduced measures for issuing punitive damages as well, as those exist in the United States.

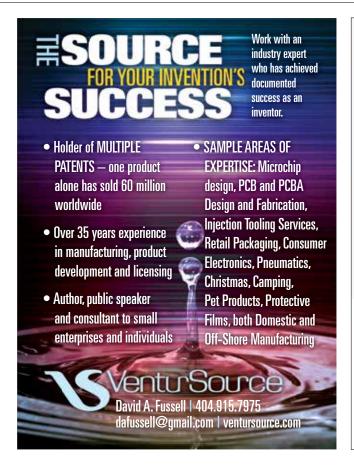
On the move

It was reported recently that **Microsoft** laid off a large group of its IP licensing team, 24 individuals altogether. This continues its transition (after joining the LOT Network and the OIN) away from its successful patent monetization model historically.

The question now is: Does it really need to file as many patents as before? If not, this could mean more moves, as several patent attorneys may also be shown the door in the future. \odot

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





The Rogue Front Pocket Wallet in Genuine Bison Leather.



Traditional, thick wallets are poorly designed. To give you a better fit and a more comfortable everyday, we reimagined what a wallet could be.

With a rounded shape to perfectly fit your front pocket, our Rogue Front Pocket Wallet is possibly the most comfortable wallet ever made. One quarter inch thin, with room for up to 12 cards. \$55. Made in Maine.

rogue-industries.com | 1-800-786-1768

IGOR KISSELEV/SHUTTERSTOCK

Building a **Distribution Strateg**

DON'T OVERLOOK ANY OF 6 ESSENTIAL STEPS

BY DON DEBELAK

ow will you distribute your product to retailers? The right solution depends on many factors, but inventors have a bevy of options that include selling in these ways and to these groups:

- Direct to retailers, small retailers and major chains sometimes at trade shows
- Through distributors, which sell a broad range of products to many retailers; or captive distributors, which sell a broad range of products to one chain of retailers
- Through rack jobbers, wholesalers that lease shelf space at large retailers. The rack jobber buys inventory to furnish products for that space and gets paid by the retailer when the products sell.
- Through your own sales force
- Via manufacturers' sales representatives—independent salespeople who typically carry 7-10 products that they sell to the same retailer group..

Steps to success

Start with a distribution approach that matches your capability. This includes financial capabilities, how many orders you can afford to build, and manufacturing capability (how many units you can afford to make). One aspect often overlooked is packaging costs. Designing and producing packaging can be a major expense when selling to distributors.

Learn which channels allow you to make money.

Retailers typically require a 50 percent discount off retail price when buying from a manufacturer and 40 percent from distributors.

Distributors also need a 30 percent profit margin. If you have a \$10 product, the retailer pays \$6 from the distributor and you sell to the distributor for \$4.20. Make sure the difference between your costs, including packaging, are low enough that you can make money at a distributor price of \$4.20.

Learn what your product needs to sell. Will your product sell from a hook with a simple package at a retailer, or will it need a more elaborate package? Will the product need a salesperson at the retailer to sell the product, or will you need a display that highlights your product features?

Small retailers often offer high levels of customer service and sales assistance. You may also need salespeople—either yours, or manufacturing sales representatives to train salespeople.

Identify your target retailer. The previous step helps you identify what it takes to sell your product. You should choose a targeted retailed group that matches the level of support your product needs and matches your resources.

For example, if you have a bike maintenance product and have limited resources, your targeted retailer might be small bike shops. Those shops have dedicated, knowledgeable salespeople, and you can expand the areas you sell to in a manner that your resources can support.

Consider your options in selling to the targeted retailer. You should first interview several owners. or buyers at several of the targeted retailers to see how they decide on what new products to try out.

Some may attend trade shows; others may rely on sales reps that call on them; others might only get leads on new products from trade magazines. The way your targeted retailer buys will vary tremendously, based on your product.

Learn what types of buying incentives targeted retailers expect for a new product. While conducting interviews, also ask what kinds of terms they typically get for a new product. They may need you to take back unsold inventory after 90 days, or expect 60-90day terms, or request an advertising allowance of 10 percent to 15 percent to promote your product in local media. They may also expect a point-of-purchase display or other in-store promotional materials.

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



U.S. Patent Filings Drop

NUMBER OF 2018 APPLICATIONS DECREASED AS THEY GREW ELSEWHERE IN THE WORLD BY GENE QUINN

■ **HE WORLD** Intellectual Property Organization's 2019 report, "World Intellectual Property Indicators," is eye-opening and should be mandatory reading for policy makers and legislators in the United States.

For the first time since 2009, the United States had a decline in the number of patent applications filed. This remarkable statistic comes as patent applications are growing in number across the rest of the world. And let's not forget that 2009 was a time of particular economic crisis in the United States and around the world, due to the global financial crisis and Wall Street meltdown brought on by the housing market collapse.

Troubling numbers

In 2018, the United States had a 1.6 percent decline in the number of patent applications filed. Meanwhile, patent filings grew by more than 5 percent worldwide.

Patent filings grew in China (11.6 percent), India (7.5), Korea (2.5), Singapore and the European Patent Office (4.7). Even low-and middle-income countries are seeing substantial increases in patent filings: Pakistan (27.8 percent), Philippines (26.7), Uzbekistan (17.5), Morocco (14.1) and Vietnam (12.8%) recorded particularly rapid growth in 2018.

Even the African Intellectual Property Organization, the African Regional Intellectual Property Organization and the Eurasian Patent Organization all reported strong growth in applications in 2018-6.2 percent, 11.2 percent and 5.6 percent, respectively.

Despite the 2018 decline in U.S. patent applications, American applicants filed the largest number of applications abroad (230,085).

A decade of decline

These statistics seem to confirm what those in the monetization, patent litigation and venture capital business have reported for several years: Innovators and innovation funding are shifting away from the United States.

Anyone who has been paying attention to the decline of the U.S. patent system, well chronicled on the pages of IPWatchdog.com during the past decade, will hardly find this shocking. Each day, it seems there are only further reasons to deter U.S. inventors to file patent applications.

In 2012, in Mayo Collaborative Services v. Prometheus, the Supreme Court was faced with patent claims that no one in the patent community thought were novel or non-obvious. Yet the Supreme Court took the opportunity to invalidate the claims as being patent ineligible because the claims at issue added so little beyond observing the natural law that the defined claim couldn't possibly be worthy of a patent.

In 2014, in Alice Corp. v. CLS Bank, the Supreme Court was faced with patent claims that related to computerizing the function of what was essentially, in the view of the Supreme Court, a checkbook register. During oral arguments, the Supreme Court was even told-twice-that the invention could have been coded by a second-year engineering student over a weekend. How trivial must the code be for that to be correct?

Where we are now

Rather than recognize that the facts of Mayo were peculiar and represent the most trivial of situations, the United States Court of Appeals for the Federal Circuit has used Mayo to destroy medical diagnostics and reiterate again and again a conclusion that is contrary to the text of the statute and Constitution: that discoveries are not patent eligible.

We are now at a point where a method for manufacturing a shaft assembly of a driveline system is considered to be patent ineligible as being a natural law. See American Axle & Manufacturing, Inc. v. Neapco Holding LLC (Federal Circuit, Oct. 3, 2019). Judge Kimberly Moore, in dissent, referred



to the majority ruling in American Axle as "validity goulash"—which is being polite.

It is asinine for a method of manufacturing a drive shaft to be patent ineligible as being a natural law. This ruling means all methods of manufacturing, and quite possibly all methods and even all patent claims, are patent ineligible because on some level everything is based upon a law of nature.

The fact that you are not floating out of your desk chair as you read this relies on a law of nature. Does that mean sitting down is a law of nature? It just might, in the view of certain federal circuit judges.

Rather than recognize the peculiarly simple, even trivial code that was admitted by the patent owner to have been written over a weekend by a secondyear engineering student, the federal circuit has so expanded the Supreme Court's ruling in *Alice* that we are now at a point where a wireless controller system for a garage door is abstract—as if it doesn't exist in any concrete or tangible form. See The Chamberlain Group, Inc. v. Techtronic Industries Co. (Federal Circuit, Aug. 21, 2019).

Obviously, a wireless garage door control system is not abstract and does exist, as do the hundreds of thousands of other wirelessly controlled innovations that have been patented all the way back to the original discovery of wireless control by Nikola Tesla.

Swallowed

Obviously, the federal circuit has jumped the shark, and is ignoring the Supreme Court's direction.

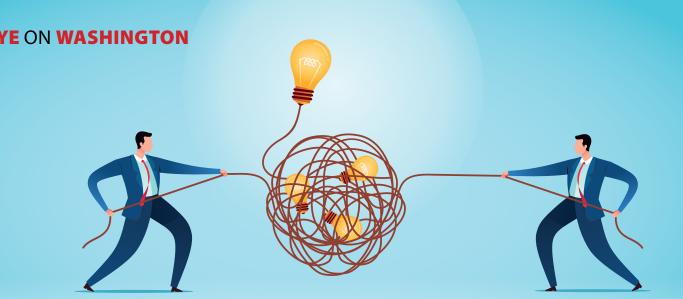
The Supreme Court specifically told the federal circuit—and all other courts and tribunals—that too strict an application of patent eligibility as a gatekeeper would swallow all of patent law, and cautioned decision makers not to allow patent law to become so swallowed.

With the law evolving to the point where no medical diagnostics are patent eligible, a wireless controller system for a garage door is considered abstract, and a method of manufacturing a drive shaft is a natural law, well, patent law has become swallowed by extreme overreach by an activist court that is driving innovation funding overseas and is now driving patenting activities overseas as well.

If this WIPO report is not the cry for help that Congress or the Supreme Court will hear, where will the industry be in 2020? 2025? The future does not look bright without intervention by those at the top who have authority to fix the mistakes they made and a willingness to put the federal circuit genie back into its bottle. ©

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





'It Is a Mess'

HOW THE U.S. PATENT SYSTEM HAS FALTERED, AND HOW UK COURTS ARE BECOMING AN IMPORTANT FORUM

Editor's note: Following are remarks delivered by IP Watchdog founder Gene Quinn during the recent ITech Law 2019 European Conference in Dublin, Ireland. Quinn's comments, edited here for length, also serve as a short overview of the status of patents in the United States.

HAT I TRIED TO DO for this presentation is figure out in about seven or eight minutes how I could convey to you what's really going on in the United States. Because, frankly, it is a mess.

The patent system in the United States, for those of you who are unfamiliar, is extraordinarily weakened from where it was 12 years ago. Getting an injunction in the United States is simply not possible anymore in litigation, except for in the most extreme situations.

Over the last 12 years, the U.S. patent system largely has become a compulsory licensing system, and increasingly so. This obviously has ramifications for all patent owners. And during this time, Congress also passed the America Invents Act, which created what's known as the Patent Trial and Appeal Board, which has made it more easy to invalidate patents in the United States. As it turns out, 90 percent of patents that actually get to a final decision at the PTAB are found to have a mistake. ...

Also along the way, the Supreme Court has been changing the laws with respect to what is fundamentally patent eligible in the United States, affecting software and a lot of biotechnology.

As a result, the U.S. patent system has become extraordinarily weaker than what you have over here in Europe—even, I would say, weaker than the system that is developing in China.

So, it is against this backdrop that we see that a lot of things are being affected in the standard essential patent (SEP) world.

Broken ecosystem

There are two different philosophies that have always existed in the patent world.

One is the belief that you don't really need patents, patents are unnecessary and innovation will happen anyway. The other says, "We need patents, because if we can't have patents, we don't have rights. And if we don't have rights, we can't monetize them. And if we can't monetize them, what's the point in innovating? Because we can't make money doing it." Because innovators—pure innovators—don't make anything. They innovate purely, and then they license to others who control the channels of distribution and marketing.

And that's largely what we see in the SEP world today. We have the innovators who innovate—the scientists and engineers. And then they pass it along to the implementers, who bring it to the consumers. And that whole process and ecosystem has to work.

Unfortunately, in the United States, it doesn't work. I think that that's why, from the U.S. perspective, we talk an awful lot about the *Unwired Planet v. Huawei* case. That is a very pro-patent owner case, because at least you have a judge and courts here in the UK, across the Irish sea, that are willing to do something.

That, from our perspective, is important. And that's why I think you're starting to see the UK courts becoming a more important forum.

If that case stands, it's only going to become a more and more and more important forum, in the SEP world, certainly, but maybe in patent litigation overall.

Case to watch

FTC v. Qualcomm is a big case in the Northern District of California, where Judge Lucy Koh ordered that Qualcomm was engaged in unlawful licensing practices by not offering competitors fair, reasonable and non-discriminatory (FRAND) licensing terms.

Now this is the first case, at least in the United States, that ordered an innovator to grant a FRAND license to a competitor. So, this is going to be overturned. It has to be overturned. It is contrary to U.S. antitrust policy and U.S. antitrust law.

"The U.S. patent system has become extraordinarily weaker than what you have ... in Europe—even, I would say, weaker than the system that is developing in China."—GENE QUINN

The Federal Trade Commission brought $FTC\ v$. Qualcomm several days before President Obama left office. And then one of the new members of the FTC had to recuse himself and it was a 2-2 vote when President Trump took over, so the case continued.

Now the Department of Justice has filed a brief taking the position that the judge got it wrong. And the Department of Energy also filed a brief saying the judge got it wrong. A whole host of other luminaries—former judges and antitrust scholars—did the same.

This gives you some perspective of what's going on in the United States. You have the FTC off in one direction; you have the DOJ in another direction. ...

With all of these different people and agencies and courts going in different directions in the United States, we're looking to all of you in the UK and in Germany to hopefully provide certainty. In the United States, there is no certainty, which continues to make it very difficult for businesses. ©

ACT-ON-TECHNOLOGY LAW OFFICE

\$1,000 patent application fee includes limited search, \$300 provisional application included if requested. Drawing/filing fees not included. 260 issued patents.

Call (413) 386-3181. www.ipatentinventions.com. Email stan01020@yahoo.com. Advertisement. Stan Collier, Esq.

CHINA MANUFACTURING

"The Sourcing Lady" (SM). Over 30 years' experience in Asian manufacturing—textiles, bags, fashion, baby and household inventions. CPSIA product safety expert. Licensed US Customs Broker.

Call (845) 321-2362. EGT@egtglobaltrading.com or www.egtglobaltrading.com

INVENTION DEVELOPMENT SERVICES

Market research services regarding ideas/inventions. Contact Ultra-Research, Inc., (714) 281-0150. P.O. Box 307, Atwood, CA 92811

INVENTION TO LICENSE

Fantastic pet system that has no rivals.
See us at PETS-LLC.com and Pets LLC on Facebook.
Fully patented and working prototypes.
I am looking for a person or company to build and market this for a licensing fee.
Please reply to alan@pets-llc.com

PATENT SERVICES

Affordable patent services for independent inventors and small businesses. Provisional applications from \$800. Utility applications from \$2,200. Free consultations and quotations. Ted Masters & Associates, Inc.

5121 Spicewood Dr. • Charlotte, NC 28227 (704) 545-0037 or www.patentapplications.net

CLASSIFIEDS: For more information, see our website or email us at info@inventorsdigest.com. Maximun of 60 words allowed. Advance payment is required. Closing date is the first of the month preceding publication.

NEED A MENTOR?

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

www.Inventor-mentor.com

Best wishes, Jack Lander

INVENTIVENESS

IoT Corner

In September, Best Buy announced it was shutting down the connectivity behind its popular Insignia smart devices, and the system went dark in early November. The IoT-enabled smart home platform included a freezer/fridge, outlets, light switch and camera system.

Most of the devices still work in passive mode (the freezer still works as a normal freezer, for example), but the back-end data system that allowed them to be app enabled via the internet has been dismantled. Best Buy is offering a partial refund to customers who bought these devices.

This announcement follows the shutdown of the Lowe's Iris smart home platform in January—a warning to consumers that not all connected platforms will survive the IoT boom. —Jeremy Losaw



Wunderkinds

Kara Fan of San Diego invented a first-aid liquid bandage to reduce the risk of superbug infections caused by antibiotic overuse, winning this year's 3M Young Scientist Challenge and \$25,000. Kara, 14, created a nano-silver solution using lemon leaf and silver nitrate to effectively kill and prevent bacteria growth. The

ninth-grader at Westview High School competed against nine other finalists in a live competition at the 3M Innovation Center in St. Paul, Minnesota, October 28-29. She also won a surprise destination trip.



What IS that?

It's nothing, really. No, seriously—It's nothing! The NoPhone Air, brought to you by the makers of the NoPhone (seen in the July 2018 Inventors Digest), is a bag of air. The company's latest farcical "product" pokes fun at people's overreliance on their phones. "Now everybody can put down their real phones, pick up the NoPhone Air, and enjoy real life," the website says. The price has been slashed from a fake \$17,000 to a real six bucks.

The estimated percentage of **software** in the United States available on the internet that has had copyright infringement.

WHAT DO YOU KNOW?

- Approximately what percent of inventions are the result of accidents?
 - A) 75 percent
- B) 50 percent
- C) 33 percent
- D) 10 percent
- Which was invented first the leafblower, or the snowblower?
- True or false: A trademark protects an invention.

color he had available. 5. D.

True or false: Walter E. Deimer, the inventor of bubble gum in 1928, used pink because it was his favorite color.

- Which of these works are covered by copyright?
 - A) Facts
 - B) Works created by the U.S. government
 - C) Works not fixed in a tangible form of expression
 - None of the above



DON'T MISS A SINGLE ISSUE!

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





Inventors

MAIL FILL OUT CARD, OR CALL 1-800-838-8808 OR EMAIL US AT INFO@INVENTORSDIGEST.COM.	
NAME	(please print)
ADDRESS	
CITY/STATE/ZIP	

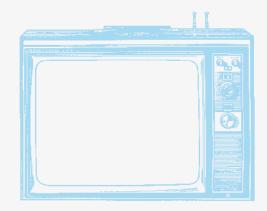
1 YEAR \$42.00 U.S. 2 YEARS \$78.00 U.S.

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

E-MAIL **PHONE**

referral code/referring subscriber (if applicable)

Keep American innovation from becoming a couch potato









Weakened patent protections have reduced the value of American inventions. To strengthen American innovation, support the STRONGER Patents Act—legislation designed to restore strong Constitutional patent rights, limit unfair patent challenges, and end the diversion of USPTO fees.

Make your voice heard now at SaveTheInventor.com

