

Inventors

DECEMBER 2020 Volume 36 Issue 12

DIGEST

Impactful

FORMER NFL STAR'S COMPANY
DEVELOPS PADDING TECHNOLOGY
TO HELP SAVE LIVES

Bored? Get Out the Board

SORRY! IS PART OF GAMES'
REVIVAL DURING PANDEMIC

IP's Future Under Biden

VIEWPOINTS ON IMPACT
OF THE PRESIDENT-ELECT

Shawn
Springs



\$5.95

PRINTED STANDARD
US POSTAGE PAID
PERMIT 38
FULTON, MO

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.

ENVENTYS
PARTNERS

Inventors

DIGEST

EDITOR-IN-CHIEF
REID CREAGER

ART DIRECTOR
CARRIE BOYD

CONTRIBUTORS
STEVE BRACHMANN
ELIZABETH BREEDLOVE
LOUIS CARBONNEAU
DON DEBELAK
ALYSON DUTCH
MARIE LADINO
JACK LANDER
JEREMY LOSAW
EILEEN MCDERMOTT
EDIE TOLCHIN

GRAPHIC DESIGNER
JORGE ZEGARRA

INVENTORS DIGEST LLC

PUBLISHER
LOUIS FOREMAN

WEBSITE ADMINISTRATOR
ELIZABETH BREEDLOVE

FINANCIAL CONTROLLER
DEBBIE MUENCH

SUBSCRIPTIONS
LOURDES RODRIGUEZ

© 2020 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

A Christmas Story Too Sweet for Words



"MOM! Come on. No way!"

"Way, Reid. Very way."

"So we sit down to play Scrabble for the first time in forever, and on the first play of the game you use all your tiles with a seven-letter word for 86 points? And the word is ... fathead?"

"How 'bout that? Isn't this a great game?"

"It is. In fact, I wrote about it recently."

"I wonder who invented Scrabble?"

"Alfred Mosher Butts. He was an unemployed architect who invented the game during the Depression."

"I'll bet the inventor played the game a lot."

"He did. But you sure wouldn't want to play against his wife. Apparently, she once scored 234 points against him with the word 'quixotic'."

"Well, you win most of the time we play. But it's still fun sharing this time with you."

"Today might be your turn to win, Mom. ... Oh, wait. Watch this."

"What word is that?"

"Can you believe it? None other than 'quixotic'! The first blank tile is a 'U', the second blank is an 'I', and the third blank is an 'O'. With the triple-letter score for the X and the 50-point bonus for also using all my letters on one turn, that's 95 points!"

"Reid Anton Creager, turn over those blank tiles."

"What? Why are you going all middle name on me?"

"Turn them over. Now!"

"OK. Hey, isn't that something? One of the tiles has a letter on the other side!"

"Maybe that's because there are only two blank tiles in each Scrabble game."

"Oh, well. Can't blame a guy for trying ... Mom, this is so great to have time like this with you at Christmas."

"I know. It's so precious to me. I would cry but I can't get the phone wet!"

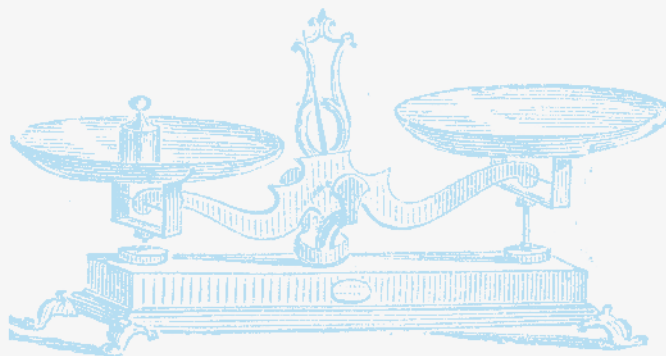
"Yeah, this COVID thing might have prevented you from flying here, but at least we have the magic of teleconferencing that allowed us to share some Scrabble."

"I wonder who invented teleconferencing?"

As the world anticipates the shining promise of a COVID-19 vaccine on the eve of 2021, let's all be grateful for the relentless innovative spirit of people who deliver products, technology, medicine and solutions for improving and saving lives.

—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

**SAVE THE
AMERICAN
INVENTOR**



Contents

December 2020 Volume 36 Issue 12



42



20



16



ON THE COVER
Former NFL star and
CEO of Windpact
Shawn Springs; photo by
Jay Premack/USPTO

Features

- 24 A Better Impact**
Shawn Springs's Company
Develops Padding Technology
- 30 Best of 2020**
Key Invention Award Winners

Inventor Spotlight

- 16 Busy in Dreamland**
Mother's Baby Products
- 20 From the Eyes of Babes**
Father's Full HD Camera

Departments

- 7 Everybody's Talking**
Conversation Pieces
- 8 Bright Ideas**
Innovation That Shines
- 10 Time Tested**
Origins of Sorry!
- 12 Lander Zone**
Unpatented Promise
- 14 Social Hour**
Wanna Be Influential?
- 23 Inventing 101**
MOU and You
- 34 Prototyping**
Electronics Issues
- 38 Launching Pad**
Knowing Your Customer
- 40 IP Market**
Windfall Hurricanes
- 42 Eye on Washington**
2 Views on Biden and IP
- 46 Inventiveness**
Focus on the Fun and Fascinating

YOU HAVE THE IDEAS

We have the most solutions
to bring your idea to market

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



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):

From my point of view, companies must not be complacent, and they must hire a patent lawyer who will be able to protect their brand and products from competitors.

You made a pretty good point about the importance of asking the prospective lawyer whether the case has a chance. I also agree with you that businesses must have proper communication and cooperation with their chosen attorney. —RACHEL FRAMPTON

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.

TAYLOR SWIFT: FEARLESS WITH TRADEMARKS

Talented? Check. Rich? Check. Famous? Check. Political? Check. Philanthropic? She writes the checks.

One of the best-selling recording artists of all time, Taylor Swift is a firm believer in the power of intellectual property. Since 2008 through her holding company TAS Rights Management LLC, the 10-time Grammy Award winner (now 30!) has trademarked the usual things like her name, initials and album titles—and registered several trademarks for phrases.

Gerben Intellectual Property reported that as of late October, her trademarks numbered more than 350. The latest are in connection with her planned festivals.

According to therichest.com, Swift earned a personal-high \$80 million in 2014 (and more than doubled that in 2015). The vast majority of that '14 income was concert ticket proceeds tied to her first pop album, "1989."

She could have gone on a shopping spree. We know she went on a trademark spree.

On August 28 her team registered SwiftStakes, a term referring to

contests to win free concert tickets. Then the floodgates opened with a series of filings involving lyrics from the "1989" album.

Rolling Stone magazine said: "The filings prohibit the use of those phrases ... from appearing without a license on everything from guitar straps and other accessories to removable tattoos.

"Some of the more obscure—and likely obligatory—items covered by her trademarks include typewriters, walking sticks, non-medicated toiletries, Christmas stockings, 'knitting implements,' pot holders, lanyards, aprons, whalebone, napkin holders and the particularly ominous collection of 'whips, harness and saddlery.'"

Those filings, with initial application dates chronicled by Xavier Morales at secureyourtrademark.com:

- Party Like It's 1989 (October 25).
- This Sick Beat (October 26, from the song "Shake It Off").
- 'Cause We Never Go Out of Style (October 26, "Style").
- Could Show You Incredible Things (October 26, "Blank Space").



- Nice to Meet You. Where You Been? (October 26, "Blank Space").

Trademarks continued to be Swift's trademark with her 2017 album "Reputation." Her management company filed to mark the title of the song "Look What You Made Me Do" and that song's line, "The old Taylor can't come to the phone right now."

It's hard to fault the business strategy of a person who has a net worth of \$400 million (per wealthygorilla.com). But the British media in particular seem amused by the trademark obsession.

Planet Radio wrote, "Tay-Tay loves a trademark!" And when announcing the release of "Reputation," *The Daily Telegraph* of London wrote, "Taylor Swift's list of ridiculous trademarks grows."

CORRECTION: Three words were missing from a note about Mark Cuban's job history in the November 2020 issue. The sentence should have read:

After moving to Texas, Cuban worked for a computer software company and was fired for closing a \$15,000 sale instead of cleaning up. —Editor

BRIGHT IDEAS

Conda Strap

CAMERA STRAP/TRIPOD

friidesigns.com/conda-strap

With the snap of a lever, Conda Strap™ morphs into a flexible base for shooting photos and video.

The strap can be used in Loose, Semi or Stiff positions. It can be wrapped around poles and posts; can rest on uneven surfaces; and can even be used as a long selfie stick.

The product comes in Standard and Plus versions. The Plus is recommended for heavier cameras. The Standard is suitable for lighter cameras such as compacts, and mirrorless and lighter DSLRs.

Tighten the camera screw with a coin; no tool needed.

Conda Strap will retail for \$150 U.S., with first shipments to crowdfunding Rewards backers set for March.

POSSIBLE DELAYS

Coronavirus-related factors may result in changing timetables and later shipping dates than companies originally provided.



BeYou

TRANSFORMING CHAIR

beyouchair.com

With arms that fold down at a number of different angles, BeYou provides more than 10 different seating positions.

One click while sitting down allows you to put the “wings” all the way up, open them flat or other positions in between.

Each wing can be set in five positions. Use them as armrests, a backrest, support for your knees, a place to put up your feet, or even as yoga blocks. The adjustable backrest lets you slide it up and down for additional back support. This also allows for adjusting the height when using it as a seat or table.

BeYou, which is expected to ship to crowdfunding Rewards backers in August, has an expected retail price of \$599.



fussy

REFILLABLE DEODORANT

getfussy.com

Claiming to be the first deodorant made entirely from plants, fussy is an alternative to single-use plastic that fills and contaminates oceans. It can save at least 250 single-use deodorants.

Just drop in a refill and put on the lid. There are no cardboard tubes, no underarm creams.

Refills are made from waste sugarcane. Once empty, they decompose in your garden or the bin. The biodegradable outer container is made from BPA-free, plant-based plastic. It absorbs CO₂ during its production, helping to reduce greenhouse gas emission.

The fussy Starter pack (outer container, two refills) will retail for about £20, or \$28 U.S. Shipping is set for January.



"Keep in mind that imagination is at the heart of all innovation. Crush or constrain it, and the fun will vanish." — ALBERT-LÁSZLÓ BARABÁSI



KALEA

KITCHEN COMPOSTER

mykalea.de

KALEA hygienically turns your organic waste into nutrient-rich compost in 48 hours.

KALEA is designed to handle the weekly organic waste volume of a typical four-person family (about two cycles of 10 liters).

The composting chamber has sensors and an intelligent control system. Its combination of temperature, humidity and aeration wakes up the natural microorganisms inside the organic material and turns it into sustainable matter. The result is ready-to-use compost for all your plants and flowers.

With a planned retail price of €899 or about \$1,066 U.S., KALEA will ship to crowdfunding Rewards backers in December 2021.

Bored?

Get Out the Board

PANDEMIC MAINSTAY GAME SORRY!, INTRODUCED IN 1934, HAS SOME SERIOUS ROOTS **BY REID CREAGER**

THESE COVID-19-related numbers are soaring, but in this context that's not a bad thing.

With families often in quarantine, sales of board games have resurged dramatically in 2020. Numbers are generally up across the board—OK, got that over with—with U.S.-based Hasbro Inc. reporting a jump of more than 20 percent in such sales as of late October, according to KGO-TV in San Francisco.

As Kayla Kibbe wrote on InsideHook.com: “The end of the world—as we’ve gradually realized amid the slow, painful

apocalypse that is 2020—is pretty boring. What do you do when you’re bored and homebound? You play board games.”

People are rediscovering classics such as Monopoly, The Game of Life and Scrabble. Hasbro’s strong year is doubtless linked to the unapologetically simple Sorry!, which celebrated its 85th U.S. anniversary last year.

But the conceptual origins of the game are a lot more involved.

British inventor

William Henry Storey of Southend-on-Sea, Essex (England) is credited as the inventor of Sorry!. He filed for a U.S. patent on the game in 1930 and received it three years later. Sorry! was introduced in 1934 in the United States by Parker Brothers.

The game was inspired by Parcheesi, which was introduced in 1869 by E.G. Selchow and Co.—later Selchow and Righter, also the manufacturer of Scrabble for many years.

Parker Brothers simplified Parcheesi’s rules. In both Parcheesi and Sorry!, players push pawns around the board; and in both games the object is the same, with the player who moves the most pawns safely to the nest (Parcheesi) or home (Sorry!) the winner.

Parcheesi, in turn, was inspired by an older game. But if you want to know exactly how far back the roots of Sorry! go, well—sorry.

PATENT PATHWAY



U.S. Patent 1,903,661 was filed for Sorry! on August 4, 1930, by William Henry Storey. The patent was issued on April 11, 1933.

In the patent application for the game, the eventual patent holder wrote a 244-word sentence describing the areas on the game board. He had applied for a UK patent in 1929.



The game was inspired by Parcheesi, which was introduced in 1869 by E.G. Selchow and Co. But the true origins go back much further.

Indian forerunner

Pachisi, a cross-and-circle board game that originated in medieval India, laid the foundation for the rules of Parcheesi and Sorry!. Unlike its later adaptations, it is played in teams.

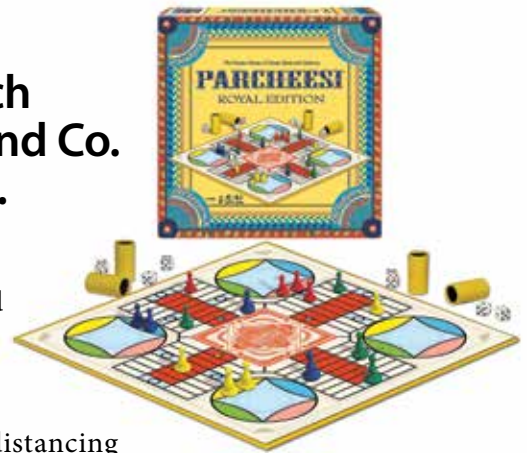
The first team to move all pieces out of the center, around the board, and back to the center wins. And just as in Sorry!, if you land on a square occupied by one of your opponent's pieces, you can capture that piece and send it back to the center (or Start).

British philologist Irving Finkel, who studies the history of board games, wrote in "Round and Round the Houses: The Game of Pachisi" (2004) that at the Fatehpur Sikri palace in northern India in the 1500s, Emperor Akbar the Great played Pachisi "in a truly regal manner" with "The Court itself, divided into red and white squares, being the board, and an enormous stone raised on four feet, representing the central point.

"It was here that Akbar and his courtiers played this game; sixteen young slaves from the harem wearing the players' colours, represented

the pieces, and moved to the squares according to the throw of the dice."

But until social distancing becomes history, a simple board game will have to suffice. 🎲

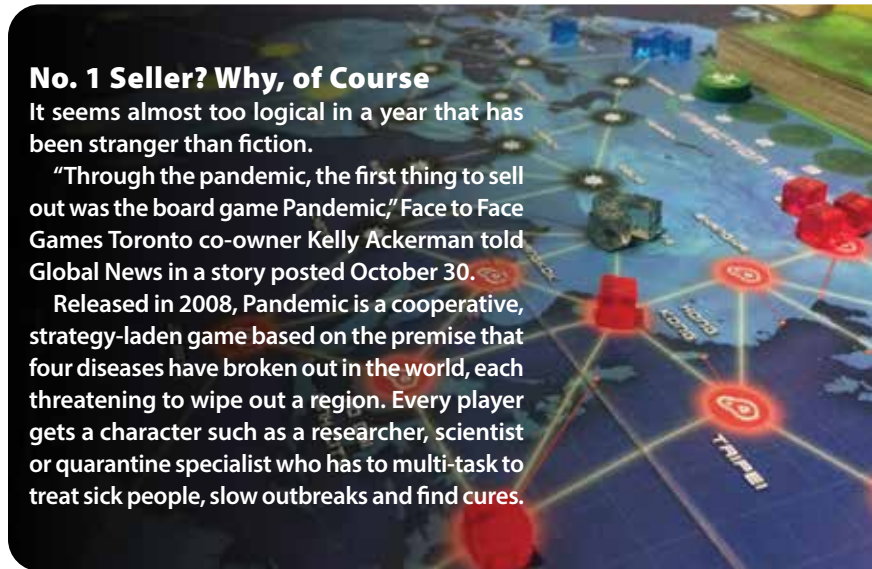


No. 1 Seller? Why, of Course

It seems almost too logical in a year that has been stranger than fiction.

"Through the pandemic, the first thing to sell out was the board game Pandemic," Face to Face Games Toronto co-owner Kelly Ackerman told Global News in a story posted October 30.

Released in 2008, Pandemic is a cooperative, strategy-laden game based on the premise that four diseases have broken out in the world, each threatening to wipe out a region. Every player gets a character such as a researcher, scientist or quarantine specialist who has to multi-task to treat sick people, slow outbreaks and find cures.



INVENTOR ARCHIVES: DECEMBER

December 1, 1948: The board game **Scrabble** was copyright registered.

The game was invented by Alfred Moshier Butts, an unemployed New York architect. He sought to combine the elements of board games, numbers games and letter games.

According to *Time*, Butts chose the frequency and distribution of the tiles by counting letters on the pages of the *New York Times*, the *New York Herald Tribune* and *The Saturday Evening Post*. But he couldn't find a corporate sponsor and enlisted the help of fellow New Yorker James Brunot to mass-produce the game. Brunot came up with the name Scrabble.



Unpatented Promise

3 MAJOR MARKETS MAY OFFER OPPORTUNITIES
FOR NICHE INVENTIONS **BY JACK LANDER**

WE INVENTORS have three basic roads for our product or idea to reach the market:

- License our patent;
- Produce and market our patented invention;
- Produce and market our unpatented invention.

The last option assumes that either your invention was never patented, or it was patented and the patent expired.

If a patent that covers your invention is still in force, (within 20 years from the date of its filing), you'll need a license from the patent holder in order to produce and market your product without fearing a lawsuit. In either case, you'll need an opinion from a patent attorney regarding your "freedom to produce," or you must obtain a license from the patent holder.

The third option has advantages—the main one that the money you save from not patenting can be applied to business startup expenses, such as special tooling.

A plastic injection mold, for example, may cost a lot more than your patent, and if your budget doesn't allow for both the patent and the mold, you may have to give up the idea of producing on your own with a patent. Also, if the mold will cost, let's say \$25,000, that investment alone will discourage others who, upon seeing it on the market, will decide whether or not to compete with you. That is especially true if the product serves a niche market that may be profitable for one producer but insufficiently profitable for two or more.

Autonomous cars here to stay

Let's assume, for the purposes of this article, that the third option—produce and market without a patent—is your choice. Then, what are the major markets that may offer opportunities for niche inventions?

Certainly the COVID-19 virus has resulted in economic turmoil, mostly resulting in negative effects such as business failures, job losses, personal anxieties and depressions, and physical health and longevity concerns. But there also are major positive changes and opportunities, which are independent of COVID-19:

- Self-driving cars
- Artificial intelligence (AI) applications
- Solar and wind power

Self-driving cars appear to be the most consumer newsworthy objects of AI. And they are closer to becoming a significant segment of the market than most of us are aware.

China, for example, has tested at least 77 autonomous cars across 1 million miles. The cars were manufactured by 13 separate Chinese companies.

In the United States, ranked in order of testing progress, are Waymo, General Motors, Ford and Tesla. GM's Cruise has 180 operating vehicles and has driven about a million miles. Ford's Argo has 100 vehicles operating in six cities. Tesla estimates having a million cars on the road by the end of this year.

How self-driven cars create opportunities for inventors is uncertain. But their presence is beyond the point of novelty. They're here to stay.

Learning is part of AI

Regardless of the potential of autonomous cars for inventors, they illustrate applied artificial intelligence in a way that enables us to imagine its benefits in other applications.

It may help to have a verbal definition of AI. Here is Google's: "The theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision making, and translation between languages."

Learning is an essential feature of AI not mentioned specifically in Google's definition. Learning is especially important for self-driven cars. Just as you or I would drive faster, and with greater confidence, on an unfamiliar road with many sharp curves or other hazards after driving it several times, AI also learns from experience.

Solar power and wind power aren't novel, but when have we ever seen a growth rate of their magnitude in a major industry? Solar power is growing at an annual rate of about 36 percent. Wind power is growing at an annual rate of 18 percent. Changes at these rates of growth are bound to offer trickle-down opportunities for inventors.

I can't imagine any immediate and obvious needs that have arisen from solar and wind power. Nor can I imagine creating a need or want where one doesn't exist.

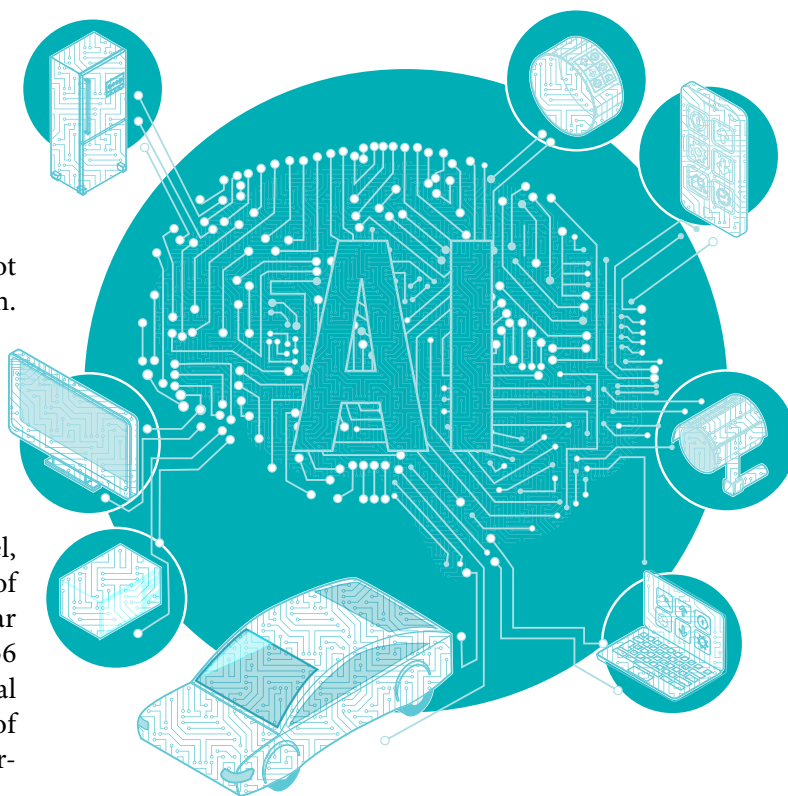
Cup holder evolution

Maybe inventing is getting harder, or I've lost my touch. But sometimes we have to live with a change for a while before we can look at it from an inventor's perspective.

I'm thinking of the cellphone holder that fits the cup holder space in cars. Detroit—or was it Japan?—ignored our need for a secure beverage holder for years. Simple as such an accommodation was, we were left on our own to fumble and spill our drinks. Now, the dual-cup holder between the front seats is as ordinary as the glove compartment—no, let's call it the map compartment—umm, perhaps the charging-cord compartment. (Evolution takes time.)

In any case, it took us years to see that the cup holder could be adapted for holding our cell phones. Now, there are nine different brands offered on Amazon. Nine! The price range is from \$12.99 for the KLKE to \$52.95 for the WeatherTech. How's that for positioning?

Incidentally, there are 74 different cellphone holders other than those that fit in the cup holder. I can't imagine that they are all turning a profit facing that kind of competition.



Autonomous cars illustrate applied artificial intelligence in a way that enables us to imagine its benefits in other applications.

How did we miss it?

Fellow inventors, get to market early. Also, forget about suing 73 infringers if your invention is this popular. Even if you've made several million dollars by being first or second in the market, you can't afford to sue the infringers.

As I've often written, look to changes for opportunities. Now, I've got to walk that back a bit.

The cupholder adaptor for holding our cellphones was staring us in the face for several years. Why didn't I see it, or you? Maybe it's because I dropped my Starbucks in my lap when that hesitating squirrel decided to run across in front of my car at the last second.

I've been so grateful for having a secure cup holder that I couldn't imagine it having another use. ☺

Jack Lander, a near legend in the inventing community, has been writing for *Inventors Digest* for 24 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.



Wanna Be Influential?

WHY YOU SHOULD CONSIDER BECOMING
A LINKEDIN INFLUENCER **BY ELIZABETH BREEDLOVE**

I F YOU'RE USING LINKEDIN to market your invention or inventing-based business but feel there's more you could do, you may want to consider becoming a LinkedIn influencer. This is a great approach for people already active on their personal LinkedIn account who want to use the platform even more to grow their network and, ultimately, their business.

(Note: LinkedIn does have an invite-only influencer program made up of around 500 users they identify as influencers. In this article, I'm using the term LinkedIn influencer to describe someone outside of the formal LinkedIn program.)

What, why, how

LinkedIn influencers are people with a large audience who share their own organic content pertaining to their industry.

Becoming a LinkedIn influencer offers a number of benefits. Perhaps the most obvious is that it gets you in front of a large audience.

However, beyond the number of views on your profile, becoming an influencer will help you get in front of the *right* people. If many LinkedIn users are engaging with your content by liking, commenting or sharing it, that provides social proof and credibility and tells the algorithm to favor your content, meaning your reach will increase.

The most important thing you can do to become a LinkedIn influencer is to prove your value to your audience. So start with a good profile. Begin by increasing your connections.

Initially, you'll want to gather more than 500 connections, because at that point LinkedIn only says 500-plus connections and hides the real number. So, no one will be able to tell how many connections you actually have.

Just be strategic about who you connect with, and don't connect with those who have nothing to do with your niche. Think quality, not just quantity.

While you're building connections, work on making your page look good. Make sure you

Initially, you'll want to gather more than 500 connections, because at that point LinkedIn only says 500-plus connections and hides the real number.



LinkedIn

have an impactful header image—one of the first things people see when they visit your profile. Ensure that your headline is interesting and that your About section accurately highlights who you are.

Content possibilities

As for posting good content, a great strategy in general is to look at what content gets the engagement you want and then reverse engineer your posts to follow the same strategy.

Your content should be unique and speak directly to your audience, but it should still reflect your personality. Feel free to use photos, videos, GIFs or even memes! Just remember to keep a narrow niche.

For example, tech startup founders should post content relevant to tech startups, inventors of home products should post about inventing and running a business focused on consumer products for the home.

Stuck on what content to post? Some ideas:

- Post content that invites your audience to engage through likes, comments or shares. For example, ask a question and invite people to answer it in the comments.
- Create and share a video; just keep it short and to the point. Most people on LinkedIn won't stop to watch a long video
- Tell an interesting story.
- Facilitate connections by creating opportunities for members of your audience to virtually "network." For example, ask everyone to leave a comment detailing what they do, what need or problem their business solves, a job opening they are looking to fill, or something else along those lines.
- Offer something helpful, like a free consultation.
- Post something eye-catching. You could share something somewhat contrarian that disagrees with a commonly-held belief related to your niche, your industry, or business strategy in general.
- Host a giveaway and ask for people to comment for a chance to win.
- Supplement your original content with curated content from other sources you trust.

Work with them

If you can't commit to the time it takes to position yourself as an influencer, you can still choose to work with LinkedIn influencers. This has its own benefits, especially if you are a business to business.

These influencers have C-suite executives and key decision makers in their audience, following them and seeing and interacting with their content. Their opinions matter. People follow them because they trust what they have to say. You stand to gain quite a bit if they promote your business or product.

So, how do you identify LinkedIn influencers to work with?

Start by doing a keyword search on LinkedIn. You can search profiles for these keywords, or content; if you're looking for LinkedIn users posting about a specific topic, a content search will likely be the best route. You can also join LinkedIn groups to look for influencers with whom to work.

Influencer program

So far I've focused on becoming a LinkedIn influencer organically, but LinkedIn's formal influencer program also has value.

This invitation-only program includes more than 500 of the best thinkers, leaders and innovators, as identified by LinkedIn. These industry leaders discuss all sorts of trending topics and provide their own insights in the form of articles and posts, with the goal of sparking conversation and helping LinkedIn users become more informed.

LinkedIn does not accept applications for this program, but the Influencers team regularly evaluates the program and the existing influencers to ensure that LinkedIn users get the most value from them. 📌

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.



Busy in Dreamland

MOTHER OF FOUR'S WEIGHTED BABY PRODUCTS MEANT TO PROVIDE SLEEP, COMFORT, SAFETY **BY EDITH G. TOLCHIN**



I T SEEMS moms and dads are inventing new baby items—often more quickly than I can keep up!

I'm a longtime fan of "Shark Tank," so when I see an item that I feel would make for a good story I often contact the inventor to see whether he or she is interested in an interview. Tara Williams, an experienced mom of four, certainly was!

Edith G. Tolchin (EGT): What is your background? Have you invented anything before?

Tara Williams (TW): I live with my husband, Rob, and children Brooklyn, Lydia, Beckett and Luke in Danville, California. I have always been an entrepreneur. My earliest memories are creating different stores where my Barbie dolls would sell things.

Over the years I have had many other ideas but none that were market ready. My parents always encouraged me to dream big and create.

I attended Bentley University, where the reality of owning my own business began to seem possible. After college, I worked for several starts-ups in the medical device space before pursuing my own company. Dreamland Baby is the first invention I have commercialized.

EGT: How did the Dreamland Baby weighted (wearable) blankets come about, and how do they work?

TW: At almost 6 months old, our son Luke was still waking up every hour and a half. Like so many other new parents, we were desperate for sleep.

One night we placed him under a heavy throw blanket while sitting on our couch. I noticed as soon as the weight was on his body, he instantly calmed down. A lightbulb went off in my head: He needs a weighted blanket!

I called my mother-in-law to sew my idea for a lightly weighted blanket. The first night

"I called my mother-in-law to sew my idea for a lightly weighted blanket. The first night wearing our prototype, Luke slept 12 hours!" —TARA WILLIAMS



wearing our prototype, Luke slept 12 hours! We could not believe how immediately his sleep had improved. Word quickly spread and I was flooded with requests from family and friends.

Dreamland Baby works like adults' or children's weighted blankets. Harnessing the power of deep touch stimulation, the gentle weight increases both serotonin and melatonin while decreasing cortisol. This results in baby feeling calm, falling asleep faster and staying asleep longer.

EGT: Why is this weighted blanket different from others?

TW: Dreamland Baby is the world's first weighted blanket designed for baby to safely wear. It is the only product that has evenly distributed, gentle weight from shoulder to toe. This pattern of weight harnesses the power of deep-touch stimulation, naturally providing baby with feelings of safety, relaxation and comfort.

When baby is calm and relaxed, he or she can fall asleep faster and stay asleep longer. There is no other wearable, weighted blanket designed for infants, making Dreamland Baby's offering completely unique.

EGT: How many different styles, colors and sizes do you make?

TW: We offer three sizes: Small (0-6 months), Medium (6-12 months) and Large (12-22 months). The Small includes a detachable swaddle wing, functioning as both a swaddle and a sleep sack, while the Medium and the Large function as sleep sacks. Dreamland Baby offers one signature print: a beautiful, gender-neutral, white, 100-percent cotton fabric with gray stars.

EGT: Where are you manufacturing? If overseas, have you had any obstacles in working with foreign factories or importing the products?

TW: We manufacture abroad. It has been a journey finding the right manufacturing partner and perfecting our product.

With each round of production, we are constantly making small, incremental improvements—some things customers may not notice, like using a stronger zipper or a more durable hook and loop closure, and other cosmetic changes like adding our logo on the zipper tab and improving our packaging.

EGT: Please tell us about safety testing, since this is a baby's product and there are many government regulations.

TW: As a mom of four with a background in the medical space, safety testing was the most critical piece to get right before bringing Dreamland Baby to market.

We designed our products in partnership with pediatricians, Neonatal Intensive Care Units nurses and certified sleep consultants. Dreamland Baby has also been reviewed by pulmonologists. Our Dream Weighted Sack is acknowledged by the International Hip Dysplasia Institute as a "hip-healthy" product when used as directed.

Dreamland Baby has exceeded all United States Consumer Product Safety Commission standards plus additional optional testing. We use 100-percent natural, soft cotton. Our fabrics are not treated with flame

The Dreamland Baby weighted blanket has evenly distributed, gentle weight from shoulder to toe that harnesses the power of deep-touch stimulation.

PATENT PATHWAY



"Dreamland Baby has a utility patent pending in the United States, Canada, Australia and in China. It was not as hard as I thought it would be.

"I found a trusted, reputable patent lawyer who made the process go smoothly. I tried to prepare as much as possible with drawings, information about any similar products, as well as exactly what made our product unique and special. This is one area where I would not skip hiring a professional!"

retardant. The inner poly pellet beads are non-toxic. We source only the best materials for ultimate comfort and safety. We ensure high-quality standards and safety in every aspect of our products.

EGT: Is it possible for the (weighting) pellets to break free and cause a choking hazard?

TW: We have a double system of protection to ensure that the poly pellets do not get free. There are two layers of protection, sewn to ensure that if an outer thread broke loose the inner beads would stay in place.

EGT: How did you get on “Shark Tank”? And did you make a deal?

TW: “Shark Tank” was such an amazing, once-in-a-lifetime experience. I applied by applying on the website. About a month later, the executive producer called to learn more about the product and my story. He was surprised that

weighted blankets for babies did not already exist and immediately saw the value.

He was impressed I had overcome both my husband and I being laid off during my pregnancy with our fourth child. We made a deal with Lori Greiner, who was my dream Shark!

EGT: Do you have any advice about product development?

TW: Find a mentor or partner who has experience in your space. If you are manufacturing abroad, try to have a product made to your exact specifications in the United States before sending it overseas. ☎

Details: dreamlandbabyco.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.



2 Critical Steps to getting your NEW PRODUCT “out there”

1 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!

www.**EGTglobaltrading**.com

EGT@egtglobaltrading.com

P.O. Box 5660 - Hillsborough, NJ 08844

845-321-2362

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.**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!



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



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

From the **Eyes of Babes**

FATHER'S FULL HD CAMERA CAPTURES
VIDEOS FROM A CHILD'S PERSPECTIVE

BY JEREMY LOSAW



FOR YOHANN TOUBOUL, the concept seemed as simple as child's play.

The entrepreneurial father of four from France was frustrated by the limitations of photos he took of his children. He liked having so many pictures of them, but they were always from the perspective of the parent and did not fully communicate the experience of what the child sees.

Touboul also was frustrated that the gifts he gave his children seemed to be forgotten very quickly. He wanted to leave them a gift that would stand the test of time and provide a better sense of the experience of the child's younger years.

So he decided to make a camera system that would tell the story from the child's perspective. Babeyes helps capture the joy (and sometimes sorrow) of parenthood from a child's vantage point.

"The idea behind this product is to record the emotion of the parents or grandparents," he said. "You have a lot of pictures of the baby, but you have nothing of what the baby sees. We try to capture this emotion with this little camera."

How it works

Babeyes is a full HD camera that mounts to the front of the baby's clothing by an adhesive backing, or by using the included clip. It features a kid-friendly winking bear design in which the open eye doubles as the camera window.

The device starts recording at the touch of a button. It features an optional automatic mode that records 20-second bursts of video onto its internal memory.

Once the session has ended, the videos are downloaded to a computer via a USB cable. There is intentionally no wireless communication built into the device to limit the baby's exposure to radio frequencies.

The product also includes post-processing software in which videos can be analyzed to automatically recognize faces and tag the people in each video.

Unusual test pays off

Touboul used an unconventional but effective technique to launch the product.

Instead of going down the path of developing the technical aspects of the product, he felt he needed to prove there was a market for



"The idea behind this product is to record the emotion of the parents or grandparents. You have a lot of pictures of the baby, but you have nothing of what the baby sees."—YOHANN TOUBOUL



Getting real

Once back in his native France, Touboul got to work making the product real.

He found a product design firm there that helped design the circuits but opted to do the prototyping in China. “We tried to prototype this in France or in Europe, but everyone said it would take a long time,” he said.

He found a reputable factory to make him a prototype sample of the device. Touboul never went to the factory, instead communicating with the Chinese development team through Google Translate.

After six months of translated conversations, he had a working prototype that was nearly perfect on the first attempt. It was only after the initial prototype that he had a colleague visit the factory to prove the workers’ capability and suitability for doing the high-volume manufacturing.

Touboul decided against trying to create a portfolio of utility patents for Babeyes. Instead, he opted to only file design patents in Europe and the United States to protect the product’s general shape and layout.

Babeyes includes post-processing software in which videos can be analyzed to automatically recognize faces and tag the people in each video.

such a device. He registered for a booth at the 2018 Consumer Electronics Show, built a looks-like prototype of the product with no working internals, and printed a bunch of marketing materials. He brought the non-functional prototype to the show and used it as a market test to see if people liked the product.

The response was overwhelmingly positive, and showgoers provided some great ideas for additional features.

“There was almost nothing inside the product, but a lot of people came to our booth and wanted to retail the product,” Touboul said.

“So we saw that it was not maybe just a silly idea for us. The idea with the emotion and the baby ... a lot of people liked this.”

The positive response gave him the validation to move forward and develop the product.

“The idea with the emotion and the baby ... a lot of people liked this.” —YOHANN TOUBOUL



He felt the value proposition for the product was largely in the high concept of how the camera is used by the baby, and in the brand identity. There is no real technical innovation in the guts of the product. This strategy has allowed him to use his funds for the development and launch of the product, not for legal and patent fees.

Making deals

With a fully developed product in hand, Touboul took Babeyes back to CES in 2019, a year after its debut. This time, he was able to sign up distributors for the product and found retail buyers in the United States, Japan, Kuwait and all over the world to sell the product.

Fueled by the success of the initial version of the product, he is turning his attention to further developments.

Touboul is finalizing a pink unicorn design for the product that will be more appealing to use with female babies. There also are plans for a new version of the electronics that will have WiFi, to allow users to directly download the videos to their smartphones. 📱

Details: babeyes.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 SOURCE

FOR YOUR INVENTION'S SUCCESS

Work with an industry expert who has achieved documented success as an inventor.

- Holder of MULTIPLE PATENTS — one product alone has sold 60 million worldwide
- Over 35 years experience in manufacturing, product development and licensing
- Author, public speaker and consultant to small enterprises and individuals

- SAMPLE AREAS OF EXPERTISE: Microchip design, PCB and PCBA Design and Fabrication, Injection Tooling Services, Retail Packaging, Consumer Electronics, Pneumatics, Christmas, Camping, Pet Products, Protective Films, both Domestic and Off-Shore Manufacturing

David A. Fussell | 404.915.7975
dafussell@gmail.com | ventursource.com

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



MEMORANDUMS OF UNDERSTANDING PROTECT INVENTORS AND POTENTIAL PARTNERS

BY DON DEBELAK

A MEMORANDUM OF UNDERSTANDING can be a useful tool for inventors to move conversations toward an agreement with a manufacturer, marketer, or distributor.

When a potential partner expresses interest in moving ahead with an agreement, the inventor is typically eager to move ahead while the potential partner is sometimes more cautious. The inventor can offer an MOU to build momentum.

An MOU states that the parties are interested in striking an agreement and the two will work toward resolving issues that either party might have.

The inventor should get the partner to sign the document, even though it is not binding toward an agreement. Once one document is signed, it is often easier to sign a second agreement.

The key components of a MOU are straightforward, helping to frame the ongoing conversation. An MOU doesn't need to be a long document; I find short agreements are much better.

Background

- **Who are the parties?** One party might be a marketer to auto parts stores. The second party could be you, an inventor of a new auto part product.
- **Purpose of the MOU.** This should state what will occur—for example, to allow the marketer to evaluate the market and competition and review product testing data.

Understanding and agreements

- **Overview.** This should state what final agreement the parties are hoping to sign. In our auto

parts case, it could be to offer the marketer an exclusive sales agreement in return for a committed level of sales per year.

- **Responsibilities.** This would include what each party will do, that both parties will negotiate in good faith, and that the intent is that an agreement can be finalized in, say, 6 months.
- **Exclusivity.** Typically, the parties will agree (on the inventor's side) not to either present the idea to a third party, or (on the marketer's side) enter into an agreement with a company with a competing product.
- **Confidentiality.** A Statement of Mutual Confidentiality is typically attached to an MOU. Although companies resist signing confidential agreements before seeing a product, they often agree to them as part of an MOU.
- **Term.** These agreements typically run 3-6 months.
- **Termination.** Either party should be able to terminate the agreement in writing if there is a feeling that the other side is not living up to its responsibilities.
- **Letters of concern.** This option says that one party or the other is not living up to its responsibilities. Normally, a conversation with the other party is advisable. ☎

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.



A Better IMPACT

FORMER NFL STAR'S COMPANY MAKES PADDING TO HELP PREVENT BRAIN INJURIES

BY MARIE LADINO

A **S HE REGAINED CONSCIOUSNESS,** the first thing Washington Redskins cornerback Shawn Springs saw was his trainer and a cluster of fellow football players standing over him, some of them in tears. Springs had just taken a hard hit from Philadelphia Eagles fullback Josh Parry while pursuing Eagles quarterback Donovan McNabb. He could hear voices, but he couldn't move or breathe.

"I remember everything before the play, but after that it was lights out," Springs says. "It's probably the hardest hit I've ever taken in my life." He left the field on a stretcher and was hospitalized with a severe concussion.

Springs looks back somberly on that night in December 2004. He describes his injury as "a real concussion, the worst you can probably get."

He was fortunate he didn't suffer any other head injuries as severe during his long football career, but the incident stayed with him.

Springs's firsthand knowledge of concussions and the harsh physicality of the game, which he describes as "a series of small car crashes," proved extremely useful as he transitioned in 2011 to his post-NFL job as founder and CEO of Windpact, a technology and applied

science company focused on impact protection. Experiences and mentors guided, challenged, and shaped him on each step of his journey toward this new role.

Vital early lessons

Springs was born in 1975 in Williamsburg, Virginia. His parents were 18 at the time. His father, Ron Springs, was one of the top football recruits in the country and soon went to play for Ohio State University.

When the younger Springs was 4 years old, his mother, Teresa Thomas, who had enlisted in the Army, temporarily left him in the care of his paternal grandmother and aunts while she was stationed in Germany.

"I always got constantly loved," Springs says of those early years.

When Springs was 8, he and his mother moved to the Washington, D.C., area. His father, meanwhile, became a running back for the Dallas Cowboys.

Springs visited his father in Texas during the holidays and the summers. Even as a child, he recognized the contrast between the rough neighborhood he lived in with his mother and the football lifestyle his father enjoyed.

Shawn Springs suffered a severe concussion during a December 2004 game, left the field on a stretcher, and was hospitalized. Now he is CEO of Windpact, an impact protection company.

PHOTO BY JAY PREWACK/USPTO



SHAWN SPRINGS

Title: CEO, Windpact,
Leesburg, Virginia

Born: Williamsburg, Virginia

Raised: Silver Spring, Maryland

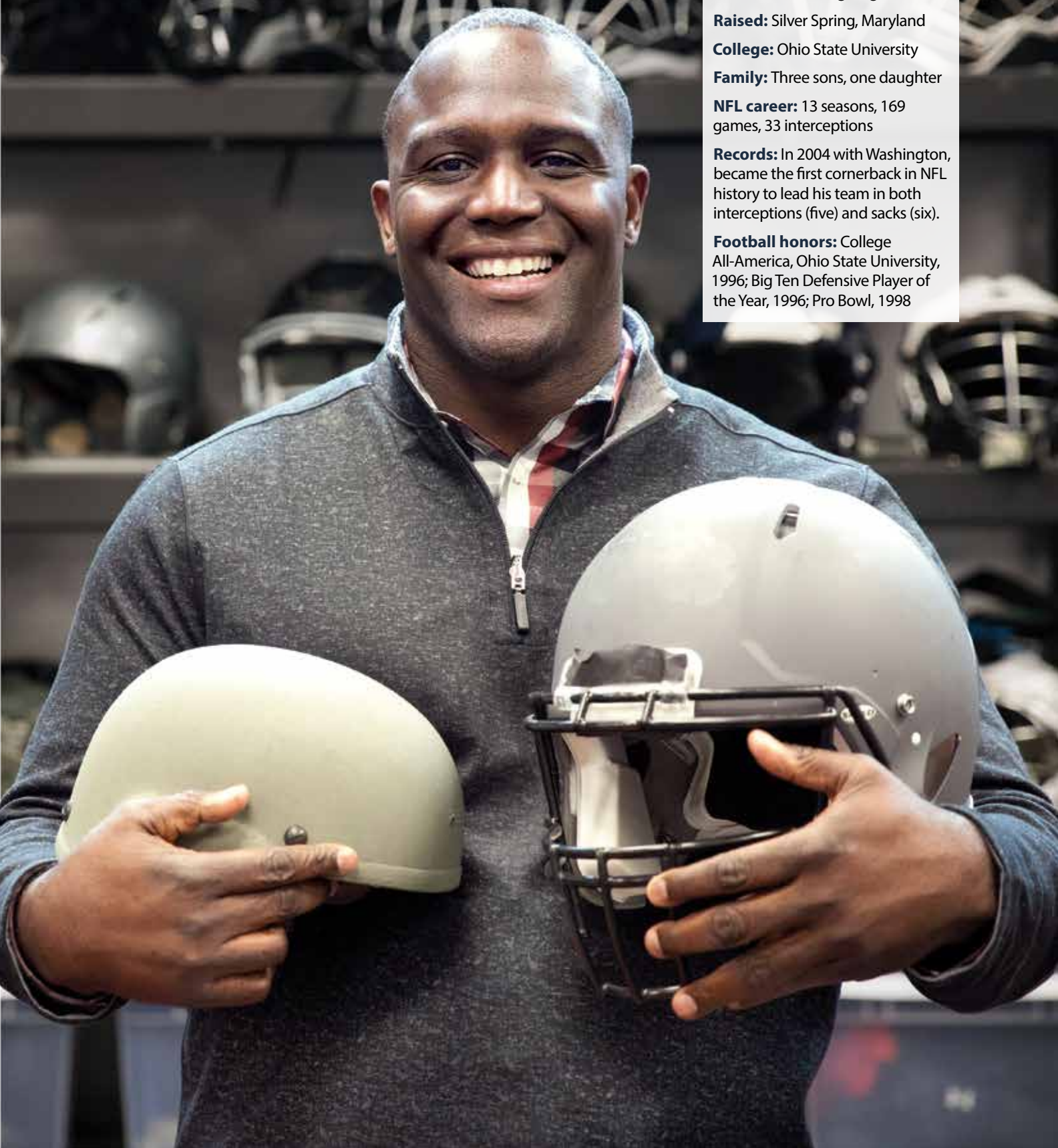
College: Ohio State University

Family: Three sons, one daughter

NFL career: 13 seasons, 169
games, 33 interceptions

Records: In 2004 with Washington,
became the first cornerback in NFL
history to lead his team in both
interceptions (five) and sacks (six).

Football honors: College
All-America, Ohio State University,
1996; Big Ten Defensive Player of
the Year, 1996; Pro Bowl, 1998



“That was a very unique perspective for me to see both worlds early,” he says, acknowledging the valuable lessons each of his early homes taught him.

Inspirational advice

Springs’s mother first encouraged him to play football. She wanted to help him channel his energy and keep him out of trouble.

When he was in eighth grade, he went to live with his father, first in Cleveland and later in Silver Spring, Maryland. His father instilled in him the importance of an education and of hard work and discipline—not just for football but for life.

“The biggest thing I learned from my dad was, [don’t be] afraid to shoot for the stars and land on the moon ... dare to dream,” Springs says.

Springs excelled at football in high school and was recruited to play at Ohio State University, as his father had. It was challenging to follow in his father’s footsteps.

“I didn’t want to be a football player. I wanted to be an architect,” he says. “I loved seeing things being built and developed.”

While in college, his renown as a football player continued to grow. Springs was chosen by the Seattle Seahawks as the third pick overall in the 1997 NFL draft. No cornerback has ever been picked higher in the draft.

Springs wasn’t thrilled at first about going to Seattle. He didn’t know much about the city, but he soon realized it was an especially exciting place to be at that time. His new friends and neighbors

worked for Starbucks and Amazon—just a small startup in the late 1990s—and Paul Allen, co-founder of Microsoft, was the owner of the Seahawks.

Springs found the innovative environment stimulating, and he admired Allen’s philanthropic work. He recalls one particularly significant conversation in which he asked Allen, “Did you know that you were going to be a billionaire?”

“Shawn, it wasn’t about becoming a billionaire,” Allen replied. “It was about doing something special and changing the world.”

“That stuck with me,” Springs says, “and I started to see the world differently at that point.”

The ‘aha’ moment

After playing for the Seahawks (1997-2004), Springs played for the Washington Redskins (2004-2009) and the New England Patriots (2009-2010). During his football career, he utilized the work ethic his father had instilled in him and further developed his ability to collaborate with teammates and commit to objectives.

Asked what made him so successful, Springs replies: “When I’m covering a receiver, I don’t think about getting beat. I think about the play I’m going to make. I know I could get beat. ... But one thing I do believe is I am also going to make a play. And that is unwavering confidence.” He carried that philosophy into his post-football career.

As Springs neared the end of his time in the NFL, he began to think about his future. He felt strongly he should do something that would make a difference in the world, as Allen had. He also wanted to give back to the game of football in some way, perhaps make it safer for his children and the next generation of athletes.

A pivotal moment came soon after his retirement from the NFL.

While in New England, he had become friends with Ken Duffy, who worked for the Dorel Juvenile Group, a manufacturer of children’s products. Duffy had gifted Springs a Safety 1st infant car seat made with a new technology designed to better protect a child’s head from impacts.

Springs was curious about the technology. In early 2011, he asked Duffy how it worked.

Below: Shawn Springs’s mother Teresa Thomas, shown with him in Boston in 1977, encouraged him to play football.

Below right: A 1993 yearbook photo from Springbrook High in Silver Spring, Maryland, shows Springs reviewing drawings in his advanced architecture class.



PHOTOS COURTESY OF SHAWN SPRINGS



Springs committed to Crash Cloud for use in football helmets after he was in a 2012 car accident with three of his children. No one was seriously injured.



Duffy gave him one of the pads from a car seat to experiment with and he brought it home and set up a test on his breakfast table, smashing one of his football helmets into the padding to see how it responded.

The wheels started turning in Springs's head.

"I made the link right then and there," he says. "Football is a series of car crashes ... this padding technology is used to protect my kid." He began to wonder if the technology could be adapted for football helmets.

A business is born

To explore and develop his idea, Springs asked Duffy to introduce him to key team members at Dorel, the parent company of Safety 1st. Dorel had patented the padding technology he wanted to consider for helmets.

Duffy connected Springs with the president of Dorel, David Taylor, who invited Springs for a visit. While there, Springs explained to the

executives his desire to use their technology in football helmets.

At first they expressed concern about doing business with a startup, but they decided to explore the possibility because they shared Springs's commitment to increasing the safety of others. Discussions among attorneys from both parties soon revealed that the patent was limited to infant car seats, so Dorel encouraged Windpact to use the technology in new ways.

Springs started Windpact (U.S. Trademark No. 5,281,738) in 2011, with a mission "to be the most advanced impact protection company in the world, to make everyday lives safer." He began to gather the information he needed to build his business.

Forensic pathologist and neuropathologist Dr. Bennet Omalu had recently begun to publish his research on chronic traumatic encephalopathy (better known as CTE)—a neurodegenerative disease caused by repeated head injuries—and

Springs observes as Parker Benzie, project engineer at Windpact, demonstrates the process of making a Crash Cloud sample at the company's lab in Leesburg, Virginia.

its prevalence in the brains of deceased football players. To learn more, Springs visited the companies that made football helmets. He wanted to better understand why innovation in helmet technology had been minimal since the time his father played football.

Crash leads to patent

An incident on a summer night in 2012 provided further confirmation of the value of the padding technology. While driving back to Northern Virginia after visiting his aunt and grandmother in Williamsburg, Springs collided with a car stopped in the middle of the highway. Three of his children were with him.

His youngest son, Shawn II, was riding in the car seat and was unhurt. The other passengers had minor injuries. When Springs picked up his family's personal items from the towing company, he looked closely at the car seat and realized it was intact. This reinforcement of the technology's effectiveness fueled Springs's desire to use it for football helmets.

With the help of his attorneys and colleagues, Springs applied for his own patent (U.S. Patent No. 8,863,320), protecting his right to use the padding technology for helmets. He also registered a trademark for the technology, calling it

Crash Cloud (U.S. Trademark No. 5,342,065).

"The Crash Cloud is a unique combination of foam and controlled air," Springs says. "It absorbs energy as it's compressed, but it also dissipates energy through impact vents.

"If you squeeze it on low and medium impacts, it's soft, and then as soon as you ... punch it really fast, it will trap the air and stiffen up, so the air component takes on the bigger impacts."

After receiving his patent in 2014, Springs began to grow his team. He hired a number of people to work with him at Windpact in Leesburg, Virginia, but he also established a network of scientists and engineers—including those at the Virginia Tech Helmet Lab and the Ballistic Loading and Structural Testing Lab at North Carolina State University—to help with research and testing.

The group soon discovered that by adjusting the type of foam and rate of controlled airflow, Crash Cloud could address many different kinds of impacts, making it a valuable technology in numerous fields. The Windpact team started to experiment with using the padding in other types of helmets, such as those for women's lacrosse, and in safety equipment like baseball catchers' masks.

SPRINGS'S FAVORITE AWARDS

February 2017: NFL awarded funding to three start-ups to develop safety technology. Windpact, which received \$50,000, was selected as the company with the best materials.

September 2017: Windpact received a grant of \$148,000 in the NFL's HeadHealthTECH Challenge II to support prototyping and testing of the company's Crash Cloud, an impact liner system using restricted air flow and foam in helmets and protective gear. Winning concepts were selected out of 85 proposals for improvements in football protective equipment.

March 2019: NFL HeadHealthTECH VI Award. Windpact was awarded \$148,820 to tailor the Crash Cloud padding technology, via virtual prototyping, for use in Schutt's AirXP Pro Q10 helmet.



PHOTOS BY JAY PREMACK/USPTO

They attracted the attention of the U.S. military and have a contract in place to use Crash Cloud in helmets for soldiers. They are also developing interior linings for automobiles.

Making a world of impact

As Windpact's staff and network continue to explore new and creative ways to use Crash Cloud, Springs knows that having a savvy intellectual property strategy is crucial.

"We have a whole plan around our IP strategy because that's it today," he says firmly. "As ingredient technology, you don't survive without an IP strategy. Building a brand is good, but your brand is built on a foundation of good IP."

Springs has won many awards throughout his life, but for him, "The coolest award I have is my name on a patent." He aspires to one day be inducted into the National Inventors Hall of Fame so he can set an example for young people,

not just as an athlete but also as an innovator. "We talk about it often in sports—the importance of being a role model, how you affect your community, doing the right things," Springs says.

"That's why I'm so excited to [show] that it doesn't matter the color of your skin, your background, what you've done before.

"If you have a wonderful, beautiful idea that you can share with the rest of the world—maybe get it patented—to make the world a better place, that's what's important. And when you think about sports ... how cool would it be to be a role model *and* an inventor to where kids could say, 'You know what? I can do both.'"

Kaarta Maron, Jay Premack, Eric Atkisson, Alex Camarota and Lauren Emanuel contributed to this report.

Shawn Springs says the Crash Cloud "absorbs energy as it's compressed, but it also dissipates energy through impact vents. If you squeeze it on low and medium impacts, it's soft, and then as soon as you ... punch it really fast, it will trap the air and stiffen up."



"Football is a series of car crashes ... this padding technology is used to protect my kid." —SHAWN SPRINGS



BEST OF 2020



INTERNATIONAL JAMES DYSON AWARD

JUDIT GIRÓ BENET INVENTS A PAIN-FREE
BREAST CANCER SCREENING DEVICE

Like most successful inventors, Judit Giró Benet identified a need and found a solution for it. She was also creative enough to think inside the box.

The Blue Box—a biomedical, pain-free, non-irradiating, non-invasive, low-cost breast cancer screening device—won the 23-year-old student the 2020 international James Dyson Award. She will receive \$35,000.

Born in Spain, Benet identified an urgent need for women to have an alternative to mammograms, citing three important reasons:

- A U.S. Centers for Disease and Control study said almost 40 percent of women skip mammogram breast cancer screening (41 percent due to pain), potentially resulting in one of three cancers detected too late.
- The Catalan (Spain) health department reported that 93.5 percent of breast cancers

diagnosed by a mammogram are “false alarms.”

- Reports say that yearly exposure to a mammogram may increase breast cancer risk.

Benet began the first prototype of The Blue Box in October 2017, as her biomedical engineering bachelor thesis at the Universitat de Barcelona. She collected 90 urine samples at a hospital, and diagnoses were performed with 75 percent sensitivity. This prototype cost €30 (\$35).

She told Dyson that “with the ultimate goal of bringing this solution to all women in the world, I then moved to California, which seemed the right place to start pursuing this dream.

“Here at the University of California Irvine, I pursued the master of Embedded Cyber-physical Systems, where I met my friend Billy. He soon got motivated to bring in his computer science background. Together, we developed the second prototype, our master thesis.



Pat Brown, the 2020 Intellectual Property Owners Education Foundation inventor of the year, went from **I**nvestigator and **P**rofessor to **O**rganizer of an Impossible dream.

IPOEF INVENTOR OF THE YEAR

In 2011, Brown was on sabbatical from his position as a Howard Hughes Medical Institute investigator and professor of biochemistry at the Stanford University School of Medicine when he committed to making delicious, affordable meat and dairy products directly from plants. The goals of his company, Impossible Foods, were to address the environmental impact of animal farming as well as meat's dangers to consumers.

Animal farming produces a dangerous level of greenhouse emissions. Health concerns linked to meat include heart disease, cancer, stroke, diabetes and obesity.

As the 2010s progressed, Impossible Foods pioneered the no-meat Impossible Burger that ended up on the menus of all 377 White Castle locations in the United States and on the menus of 5,000 restaurants in all 50 states by late 2018, Forbes reported. Bill Gates had become one of its investors.

Impossible Foods also unveiled a prototype for dairy-free milk in late October this year.

The winner of the 47th Inventor of the Year Award is scheduled to be honored during the IPOEF's annual celebration December 8-10.

"We continued tackling the same set of cancer biomarkers but started making use of artificial intelligence, and deployed a cloud server that allowed a much powerful algorithm to be run. These enhancements led to a classification rate of greater than 95 percent."

She says a household owning The Blue Box can have all of its female members tested at their desired frequency and convenience. After creating a profile at The Blue App, the user collects some urine in a plastic container and places it inside The Blue Box, then presses the Start button in the app.

During the 30 following seconds, the six chemical sensors inside The Blue Box—in direct contact with the urine—begin reacting to targeted breast cancer biomarkers (if any). The captured signal is sent from The Blue Box to the cloud, where the AI algorithm is run. The diagnosis is then sent back to the user's phone and displayed in the app.

The annual international James Dyson Award encourages students to engineer problem-solving inventions to some of the world's largest problems.



COLLEGIATE INVENTORS WINNERS

“Global crises and challenges don’t stop innovation; they accelerate it.”

Those words from National Inventors Hall of Fame CEO Michael Oister reflect the optimism and excellence displayed by student teams that were named winners in the 2020 Collegiate Inventors Competition®.

This year’s NIHF program, sponsored by the United States Patent and Trademark Office and Arrow Electronics, consisted of 24 students from nine colleges and universities across the United States. They presented their inventions in a virtual format to a panel of final-round judges composed of NIHF inductees and USPTO officials.

In addition to cash awards, the winning teams also receive an opportunity to meet with a NIHF Inductee for mentorship and advice.

Winners (\$10,000 prize): Undergraduate—Universally Friendly Obturator, Rice University. Team members Elisa Arango, Susannah Dittmar, Lauren Payne and Sanika Rane (advisers Alexander Hanania, Michelle Ludwig and Matthew Wettergreen).

Cervical cancer disproportionately affects low-income countries where cases progress to later stages, contributing to more than 300,000 deaths globally each year. Brachytherapy, a type of radiation therapy, is the only curative treatment for late-stage cases but is infrequently used due to its complexity. The Universally Friendly Obturator addresses this challenge by providing a customizable device that simplifies the procedure and lowers patient morbidity, making the treatment more accessible to all women worldwide.

Graduate—SanaHeal, Massachusetts Institute of Technology. Team member Hyunwoo Yuk (adviser Xuanhe Zhao).

During surgery, tissue adhesives are regularly used to support suture or staple lines. However, current adhesives are ineffective to seal wet tissues, do not provide rapid, strong adhesion, and often lack a stable and long-term sealing capacity. The SanaHeal bioadhesive is a dry strip of tape

that has the unique ability to bind together wet tissues and can potentially replace the staples or sutures used to close surgical sites following an operation and provide healthier healing.

Runners-up (\$5,000 prize): Undergraduate—Dyad Syringe, Stetson University. Team member Bryson Pritchard (adviser Lou Paris).

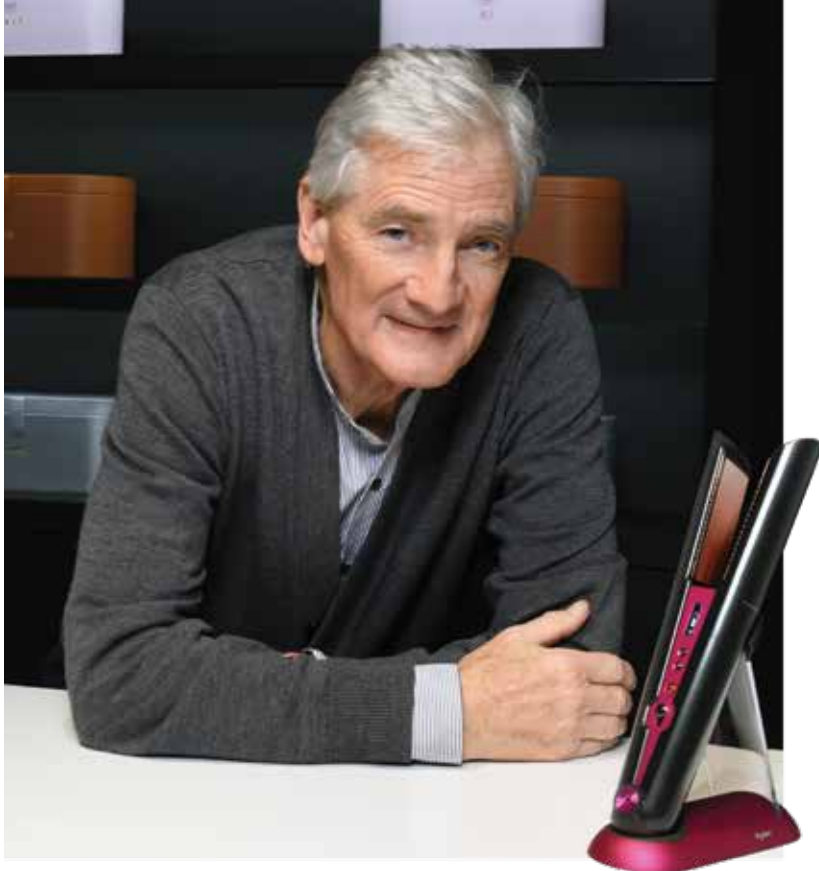
When multiple medicines are applied intravenously, sanitation and replacement of the syringe is required. The Dyad Syringe streamlines this process by providing two chambers: an empty one for the medication and a bottom chamber containing a saline solution. A punching device is used to puncture the latter chamber, thereby sanitizing the catheter. This innovative design is the first syringe that allows the administration of medication and sanitation of the device in a single action, which saves time and lessens the chance for infection.

Graduate—Hearo, Johns Hopkins University. Team members Adebayo Eisape, Ian McLane and Valerie Rennoll (advisers Mounya Elhilali and Jim West).

When captured, acoustic waves can provide valuable information beyond what the ear detects, supporting efforts from structural monitoring to gathering details about a person’s health. The Hearo is a self-powered, flexible electrostatic transducer that can be tuned and optimized to minimize differences in acoustic impedance and attenuation. It enables significantly higher-quality acoustic recordings and communications, even in noisy environments.

Arrow Electronics People’s Choice Award (\$2,000 prize): TrachTech, Tulane University. Undergraduate team members Morgan Bohrer, Stephen Hahn, Michael L’Ecuyer and Alex Verne (adviser Mark Mondrinos).

TrachTech developed device to clean intubation tubes in ventilators and remove biofilm buildup. It is designed to efficiently remove debris from tubes and maintain continued airflow from ventilators during cleaning. 📌



STRAIGHT SCIENCE

EXTENSIVE EXPERIENCE, RESEARCH BEHIND DYSON'S CORRALE HAIR STRAIGHTENER

T O HEAR Sir James Dyson talk about his company's new Corrale™ hair straightener, one might think he uses it himself.

This is part of what Dyson says separates the Corrale from other hair-straightening products: the iconic company's comprehensive experience, research and understanding of the science behind the technology and how hair responds to it. The other part is Dyson's patented flexing plates, which shape to gather hair and deliver enhanced styling with greatly reduced damage in a cord-free format.

Dyson has been researching the science of straightening for almost a decade, investing more than \$129 million into hair laboratories around the world and employing thousands of hair scientists, engineers and professionals. These teams have studied in detail everything from the structure of hair to airflow dynamics while understanding thermal, mechanical and chemical damage—and the subsequent effects on hair health.

James Dyson's intricate explanation of how the Corrale evolved:

"Since we first started developing the Dyson Supersonic™ hairdryer, we have continued to explore the science of style, seeking to understand what makes hair smooth, shiny and glossy, and what makes it dull, damaged and lifeless. We have been worried about the style results and heat damage from flat-plate straighteners.

"Flat hair irons apply tension and heat only on the thickest part of the hair tress. The strands at the edges are not clamped, leaving them slack, unheated and leaving flyaways. It requires multiple passes on the same section of hair tress to give an even look, by which time excess heat may have caused reduced strength and less gloss.

"We discovered that if the plates could conform to the precise profile of the tress, then with each pass we could apply the correct tension to all the hair strands. This means that we get an enhanced style and without excessive heat damage.

"We simply do not need the heat that others apply. We engineered unique flexing plates of magnesium copper, wire eroded to a precise accuracy of 65 microns to adapt to the shape of the hair tress. The copper plates wrap around the tress, applying even heat and tension to all the hair strands, keeping them aligned."

The Corrale features Dyson's Intelligent Heat Control for precise temperatures, together with 4-cell lithium-ion battery technology.

It has three heat settings: 330°F (165°C), 365°F (185°C) and 410°F (210°C). These temperatures allow the user to tailor the settings to suit his or her hair type and desired style.

This adaptability, combined with the increased control provided by the flexing plates, allows users to style at lower temperatures without compromising results. ☞

Details: [Dyson.com](https://www.dyson.com)

Electronics? Grrrrrr

SOME FRUSTRATING WAYS THESE PROTOTYPING COMPONENTS CAN FAIL—AND HOW TO AVOID THEM **BY JEREMY LOSAW**

ELECTRONICS are fun to prototype, but they can be very frustrating when they do not work.

When problems arise with mechanical prototypes, you can often see what is happening and the feedback is physical. However, with electronics, the motion of electrons is invisible, and the parts are often small. To troubleshoot, you have to rely on feedback from voltmeters or other measurement devices to see what is happening—and the small size of the components amplifies the potential for frustration.

However, it is rewarding to finally troubleshoot a circuit and get a prototype electronic device up and running. Here are some common ways that electronics prototypes fail and how to avoid them.

Poor connections

The No. 1 cause of electronics issues is a bad connection.

This can be maddening and time consuming to troubleshoot. Sometimes, electronic prototypes start acting strangely for no obvious reason. Components will stop working, microcontrollers will stop taking code or some other frustrating issue, and it is usually traced back to a fragile connection.

Sometimes, the culprit is obvious; you may see a wire that has obviously come loose. However, a hairline crack in a solder joint can be just as devious and a whole lot harder to spot.

The best defense against poor connections is documenting the circuit while it is working before trouble hits. Take lots of pictures of the circuit in its working form and get closeups on all solder

joints. This provides a good document for how to rebuild the circuit if something should go wrong.

It is also helpful to invest in a digital microscope. With these devices, which plug into a computer, you can get a closeup view of components and solder joints to see whether there are cracks in the solder or conductive debris that may be accidentally creating a short-circuit.

Another way to combat against poor connections is to eliminate extraneous wires and connectors by transferring your design to a custom-printed circuit board. In a way, a PCB is just a surrogate for wires and connectors.

The traces on the board make the connections between different components and do it in a tidy way that is hard to disconnect.

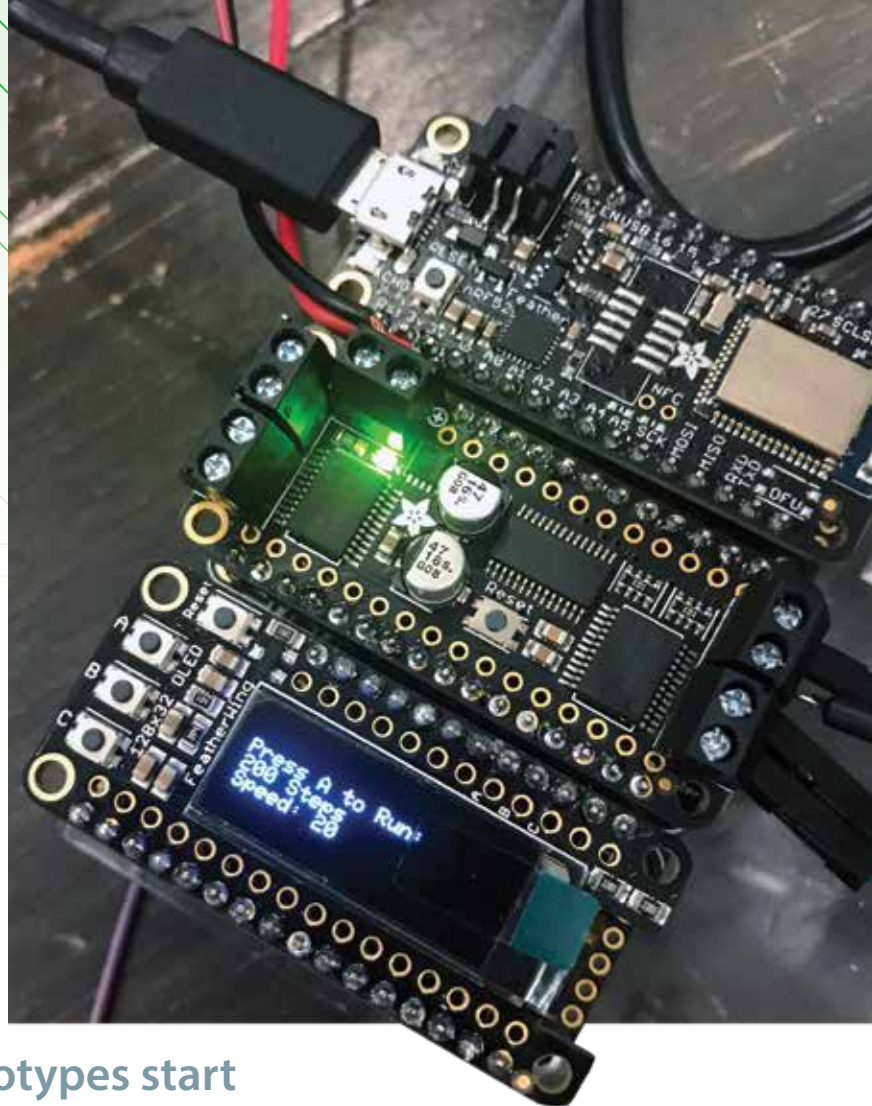
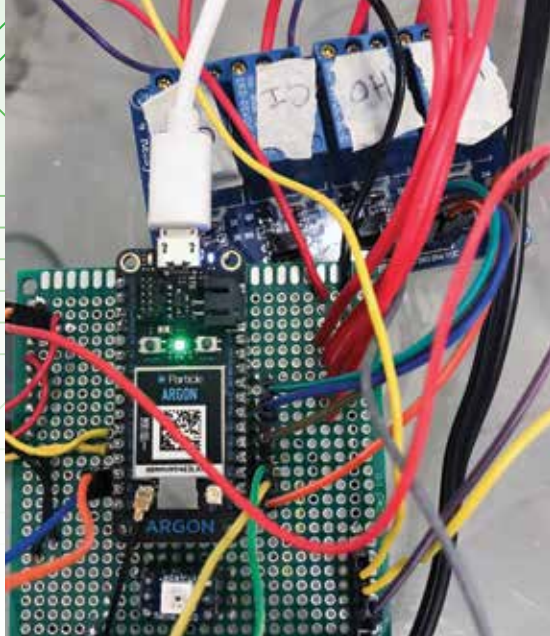
PCB design is a specialized skill but not impossible for garage inventors. ExpressPCB, a circuit board manufacturing house, offers free PCB design software that integrates with its prototype board fabrication service.

The software is easy to use, and it is less than \$100 to purchase the boards when you are done with your design. However, if you have a complicated design or cannot figure out how to use the software, it is best to seek a professional.

Too many wires

In early stage prototyping, it is common to lay out a breadboard of a circuit with jumper wires connecting the different components. It is a necessary part of the process and crucial to working out the details of a circuit.

However, you are asking for trouble by putting breadboards with jumper wires into prototypes.



Sometimes, electronic prototypes start acting strangely for no obvious reason.

The jumper wires always seem to be too long and will crash into mechanical housings, which can interrupt mechanical motion inside the prototype. It is also easy for them to fall out and disconnect. If you do not use consistent color coding for the circuit, it is maddening to try to fix.

If you have many wires in your prototype, you have to take care of them.

It is good practice to use a sensible color scheme for the wires. Red for the positive side of the power source and black for the ground terminal is common for many circuits, with other colors used for different data lines.

It is also important to keep them from being physically stressed. The wires should be long enough to go from component to component and still have slack so the solder joints or connectors do not bind. It also helps control and keep the wiring tidy if wires going to the same place are zip-tied together to make a common bundle.

Another way to prototype electronics with a minimum of wires is to use parts that are built into shields.

Arduinos and other microcontrollers are designed with a specific pattern of headers such that sensors, actuators or other components can be installed on a different but same-sized board. Then they can be stacked on top of the main controller PCB like a sandwich. This ensures a quality connection between each layer and eliminates wires.

Repair gone wrong

Circuit boards are particularly prone to iatrogenic problems—i.e., when a repair can often cause unintended damage.

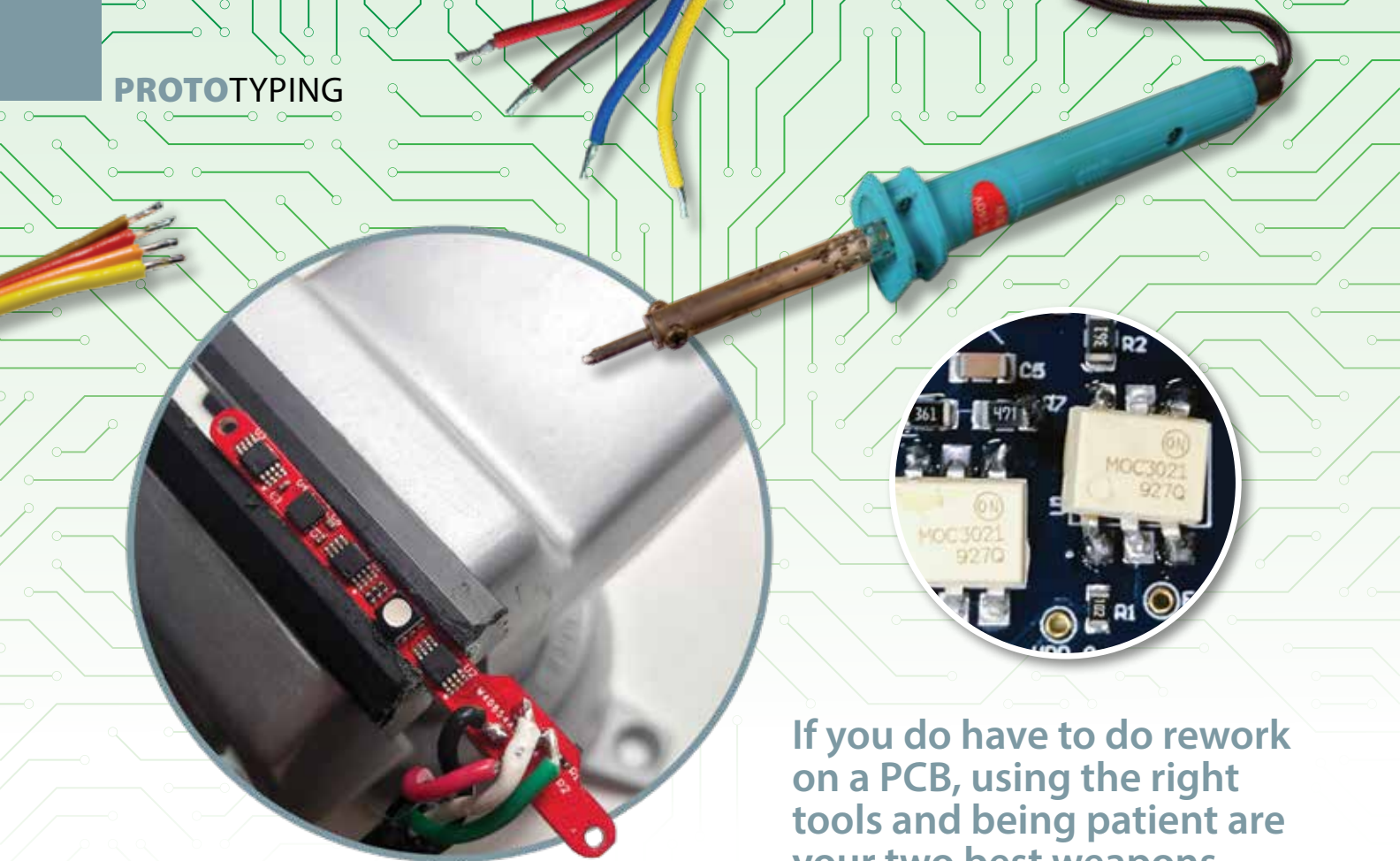
Every time you try to repair a circuit board, you create an opportunity to hurt it. The more often it is repaired, the more likely it is to develop a problem.

One of the most common results of unintentional damage from too much handling are

Above: This circuit used three different feather-style shields to cut down on the amount of wiring between the microcontroller (top), motor driver (center) and OLED display (bottom).

Top left: This circuit is great for a proof of concept, but the design needs to be transferred to a PCB as soon as possible to avoid potential problems.

Above left: A smart-phone microscope was used to capture this image of a component that was suspected to have connection issues.



If you do have to do rework on a PCB, using the right tools and being patient are your two best weapons.

Above: Holding your circuits in a vise can help you do more precise repair work and prevent problems.

Above right: This component was accidentally affected by overheating during a repair. The component has shifted, and the legs are bent.

destroyed traces on the board. The traces are the layer of copper underneath the colored skin of the circuit board (usually it is green) that connect the components. They can be easily damaged or torn when not handled carefully during rework—for example, if you pull too hard on the component while trying to desolder it.

Another result of accidental damage is overheating sensitive components.

Most electronic components have a pretty high temperature threshold, because they have to be capable of being installed in a high-temperature oven to solder them to the PCB. However, concentrated heat from soldering irons can be troublesome. LED lenses can be melted, or the protective shells around integrated circuit components can be damaged and cause failure.

The first and most obvious way to reduce unintentional damage to a PCB is to not have to repair it in the first place. Being rigorous in your design and breadboard prototyping will help to work out any issues with the circuit before investing in PCBs. Then there will be

low risk in assembling the vetted components onto a new board.

If you do have to do rework on a PCB, using the right tools and being patient are your two best weapons.

Rework on a PCB usually means soldering, so it is important to invest in a quality soldering iron before attempting a rework job. It is also important to use a soldering iron tip that matches the size of the components on which you work.

For example, do not use a huge chisel tip when working on small surface mount components; there is too much risk of affecting nearby components. When working on components with multiple legs, it can be helpful to use a hot air reflow gun for placement and removal.

These tools are like ultra-high-temp hair dryers but have small nozzles that blow concentrated air over a small, controlled area. This allows for solder to be melted on multiple pads on a single component at once.

Keeping the PCB stable while you work is also crucially important. Using a PCB vise can help control your circuit during repairs. ☺

Climb the 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:



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

PLATINUM SPONSORS

ENVENTYS
PARTNERS

SAVE THE
AMERICAN
INVENTOR

GOLD SPONSOR



SILVER SPONSOR

THE MICHELSON INSTITUTE FOR
INTELLECTUAL PROPERTY

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.

Know Who Your Customer Is—and Isn't

MAKE THIS YOUR OBSESSION, YOUR CONVERSATION,
AND DON'T BE AFRAID TO BE SURPRISED **BY ALYSON DUTCH**

BEFORE YOU SPEND MONEY on creating a product or service, make an educated guess about your customer. As you develop your business, keep the attributes of this person firmly in mind and remain open to how that target may change.

The smartest entrepreneurs listen more than they talk, so they can be responsive to what someone wants, needs—and will pay for.

Oddly enough, I'd say about 50 percent of my clients are surprised by who their customer turns out to be. The most successful of them adjust their packaging, product and marketing to even better appeal to the target.

I once worked with a basketball shoe company that had a specific function: The product's function was to prevent ankle sprains, which were the No. 1 injury suffered by basketball players.

The company predicated its launch on market research that showed urban kids ages 12-18 purchase an average of five or seven pairs of kicks a year.

The financial forecasts seemed worth pursuing at first. But after the company developed the product, it found something very different about this customer: It turned out to be a 35-55-year-old weekend warrior basketball lover and obese customers who needed ankle support!

Talk about surprising. But if someone is paying you, who are you to say you want to sell to someone else? Sell to those who are paying you.

Talk customers with others

Defining a customer can be fun. I recently learned a new word to describe what I used

to call "Brainstorm Dinner Parties with Great Wine." Now I call them "charrettes."

The word, which comes from the world of urban planning and architecture, means a get-together to concoct ideas.

When I have planned these little soirees, I put together a group of the smartest people I can find.

We ask a series of questions that may include:

- Who might buy this?
- Why would they buy it?
- Where would they be when they learn about it?
- How much would they pay for it?
- What do they do in their spare time and for a living?
- Which retailers or e-tailers do they frequent?
- Where and why do they buy this kind of stuff?
- Do they buy online only? Why?
- Do they go to stores for this particular thing? Why?
- How much money do they make?
- Where do they live?

Who the customer isn't

Launching a product is a process of letting customers tell you what they want—and more important, what they don't.

Don't be vain about your vision; listen to your customer and adjust. Sadly, I've seen so many entrepreneurs who are so in love with their idea, they cannot pivot.

Why does this happen?

Well, this is a study in the human condition, so it comes down to this: No one likes to hear negative things about their hard work.

But it's this negative feedback that is the most valuable.



Don't be vain about your vision; listen to your customer and adjust. Sadly, I've seen so many entrepreneurs who are so in love with their idea, they cannot pivot.

Sometimes this feedback forces an entrepreneur into a total redo. But, again, if the reason you're developing a product is to actually build a business, look for it.

An example of customers who are NOT customers:

For a store that makes lattes and cappuccinos out of green tea, its customer is not a coffee drinker. It's a tea drinker who appreciates the health properties of green tea.

A sad fish story

More on this green tea company customer that supports this idea: This company had created a brilliant "Starbucks of Green Tea." Its pilot store was in a high-density area where commuters travel to work. As such, it featured food cases with morning yummy things.

The Japanese entrepreneurs created the product mix based on their natural cultural proclivities and stocked the front cases with fish—the thing they eat for breakfast. For the Americans, the customers at that location, this was a huge turn-off. No matter how much we explained cultural breakfast mores and that those cases needed to have bread items in them, the fish remained.

Another issue about this brand was parking. There was none. Because Southern Californians often drop by to get coffee on their long commutes to work, the company severely limited its potential, basically, to only those who walk—and we all know that no one walks in L.A.

Had this store been in another location where there was a rich community of Japanese and/or tea lovers—who walk—it had an excellent chance for success. These fatal flaws crushed the entrepreneurs' plans to franchise 30 of them, and the investor money to expand never materialized.

And had these customer issues been raised before real estate was rented or a product mix was developed, this failure could have been avoided and this could have been one heck of a success.

Pay attention to who wants and will use your stuff. It's the only thing that matters. ☞

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.





Windfall Hurricanes

A NEW PHENOMENON, LITIGATION-BASED FUNDING, EMERGES WITH RECENT MASSIVE INFRINGEMENT AWARDS

BY LOUIS CARBONNEAU

REGULARLY remind readers of the five main factors that drive the IP market:

- Noticeable change in the supply and demand chain;
- New case law that may have a long-lasting impact;
- Change in the regulatory environment;
- Recent large damage awards against infringers;
- Stock performance of publicly traded IP companies (PIPCOs).

Of the five, the last one may have lost some of its steam over time because there are too few PIPCOs left to provide reliable data. Most non-practicing entities or NPEs—an entity holding a patent for a product or process with no intention of developing it—are operating as private companies, and their stock does not track on the market as well as we'd like to see.

But a new phenomenon has emerged. Massive amounts of cash are now available to patent owners for asserting their assets, or what we refer to as litigation-based funding.

This factor is probably on par now with the general health of the public NPEs as a good barometer of where the market is going. It is actually a better indicator than the one it is replacing, because it reflects the willingness for sophisticated lenders to enter into high-risk investments (PIPCOs' performance was always skewed by how third parties saw their financial performance). Also, it is common knowledge that very few analysts like the lumpy revenue model of IP-centric companies.

20 years of modest awards

Going back to the five main factors, let's talk about a potentially seismic change in one of those—namely, when there is a recent massive court award in a patent case.

To put things in perspective, most victorious parties in a patent case do not receive a windfall. According to the latest PWC Patent Litigation Study that came out in 2019, the median damages award in the most recent 4-year period for which data were available (2013-2017) was only \$6 million. This amount increased to slightly more than \$9 million once you exclude summary and default judgements.

Median damage awards for the previous three 4-year periods were: 1998-2002, \$6.1 million; 2003-2007, \$7.3 million; 2008-2012, \$5.1 million.

The annual median damage award during those 20 years was \$5.9 million, with a low of \$1.9 million in 2010 and a high of \$17.4 million in 1999. The 2017 median damages award soared to \$10.2 million after being \$6.1 million the year before.

(On the other hand, median damage awards excluding summary and default judgments have climbed, though modestly, for each 4-year period: 1998-2002, \$6.5 million; 2003-2007, \$7.8 million; 2008-2012, \$7.9 million; 2013-2017, \$9.2 million.)

Furthermore, there were very few extraordinary awards in patent cases in the past five years or so. This coincides with the apex of both the software-unfriendly 2014 *Alice* ruling and inter partes review challenges—both responsible for the invalidation of so many patents that were otherwise infringed.

A slew of recent windfalls

We have seen the pendulum swinging back in the past couple of years. Since the PWC study was published, several large damages for patent cases have been awarded by U.S. courts:

- \$200 million by the United States Automobile Association against Wells Fargo in November 2019 (later increased by another \$100 million to reflect willful infringement);



Massive amounts of cash are now available to patent owners for asserting their assets.

- \$752 million to Sloan Kettering against Kite Pharma in December 2019;
- \$500 million to VirnetX against Apple, confirmed in 2020;
- \$400 million to KAIST against Samsung (later settled for \$200 million);
- \$506 million to the University of Wisconsin against Apple in 2018 (later overturned);
- \$155 million to Bayer Healthcare against Baxalta Inc. in February 2019; and
- \$137 million to Rocher Diagnostics against Meso Corp. in December 2019.

This year, things got really interesting: \$1.1 billion to Caltech against Broadcom and Apple in January, and an October mega award of \$1.98 billion to Centripetal against Cisco.

This latest verdict against Cisco (*Centripetal Networks, Inc. v. Cisco Systems, Inc.*) took the IP community by surprise. Apart from the judgment itself, the case is interesting because it involved a 22-day bench trial (no jury) via video.

This is one of the rare cases in which a judge, not a jury, granted such a high award. Although Cisco will undoubtedly appeal the case, this amount is less likely to be overturned than if it came from a jury; juries have a tendency to overinflate damages in an effort to punish who they see as being the bad guy.

How both sides react

Each time a large award like this is made public and regardless of the fact that it may later be overturned or decreased through an appeal, a few things happen.

C-suite executives in companies that are or may be sued for patent infringement find

themselves forced to have the discussion at the board level as to how to avoid such a scenario.

The logical answer is inevitably to mitigate those risks by taking a license to the patents at a much lower price earlier on in the process. In other words, practicing “efficient infringement” can still be a costly proposition.

Second, it emboldens more patent owners to assert their own patents (with the unfortunate perception that they, too, will become billionaires). It encourages more litigation-funding entities to gamble on more cases because the potential upside is so high and much better than what the stock market can ever offer.

The increased litigation forces infringers to pick their battle and become more flexible in their willingness to move away from the “scorched-earth” approach—and therefore be more mindful of other people’s patents. Logically, all this leads to higher valuations for this asset class, as the alternative has now become more risky and more expensive.

We predict this latest court award will continue a trend that started less than two years ago, pointing decisively toward higher values for very high-grade patents. But please know that it won’t make mediocre patents any more valuable. ☎

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.





2 Views on

FORMER USPTO DIRECTOR SAYS 'POSITIVE CONTINUATION' IS A REASONABLE EXPECTATION **BY EILEEN MCDERMOTT**

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

ON DAY 1 of IPWatchdog's SEP2020 on November 10, keynote speaker David Kappos told IPWatchdog President and CEO Gene Quinn that the intellectual property community should not panic about what a Joe Biden administration might mean for standard-essential patents (SEPs), or IP more broadly.

(Editor's note: An SEP is a patent claiming an invention that must be used to comply with a technical standard. Standards organizations often require members disclose and grant licenses to their patents and pending patent applications that cover a standard the organization is developing.)

"I have reason to believe we could see a positive continuation of what we've seen in recent years," said the former director of the United States Patent and Trademark Office.

"President-Elect Biden comes from a background where he (understands) IP. I worked with him on IP issues under the first Obama administration and he demonstrated an appreciation for the balance that involves intellectual property.

"He comes from a state—Delaware—that means business about IP, with a strong specialty chemicals industry in that state and a strong patent jurisprudence."

Additionally, Biden would have people like Sen. Chris Coons (D-Delaware), who has been "an extremely strong advocate for

strong intellectual property," around him, Kappos said. "I have a tremendous faith in (Coons) as a force for making sure we continue going in the right direction."

An advanced approach

Kappos was addressing Quinn's question about the fate of protection for SEPs under a new presidential administration, considering all the positive changes people such as Assistant Attorney General of the Antitrust Division of the U.S. Department of Justice General Makan Delrahim have made for SEPs under the present administration.

Kappos focused his keynote remarks—titled "On a Roll: The Developing Appreciation for the Intrepid Resolve and Towering Contributions of SEP Innovators"—on the changing landscape of IP protection for SEPs in recent years. This has improved in part due to decisions made by Delrahim, who Kappos explained took SEP policy from a "Retro Jefferson" to a "New Madison" approach (terms coined by Delrahim in 2018 remarks).

The Retro Jefferson Approach to SEP policy taught that patent "hold-up"—in which SEP owners allegedly charge unreasonable licensing fees for standard-essential technology—was a key underlying concern, that regulators need to curb patentee power. The New Madison Approach teaches that hold-out—in which potential licensors collude to hold out for cheaper licensing terms—is a far bigger problem than hold-up. It also teaches that hold-up should not be governed by antitrust law but by contract law.



Continued on page 44

Biden and IP

TIES TO PAST INVENTOR-UNFRIENDLY POLICIES
ARE CAUSE FOR CONCERN **BY STEVE BRACHMANN**

JOE BIDEN will likely be inaugurated president on January 20. What this means for intellectual property will take months to parse.

Perhaps the best indication of Biden's views on IP are found on his "Made in America" platform page. This page contains the most references to "innovation" on joebiden.com and discusses the creation of "millions of new manufacturing and innovation jobs throughout all of America" during a Biden presidency.

After charging the administration of President Trump with mainly relying on trickle-down economics for his innovation strategy, the Biden "Made in America" platform promises to invest \$300 million in research and development programs in areas such as electric vehicles, 5G networks and artificial intelligence.

Together with a pledge to spend \$400 billion in procurement investments on American-made goods, the Biden campaign claims that it will create five million American jobs in manufacturing and innovation.

Links to iffy legislation

However, intellectual property protections are typically where the rubber meets the road as far as implementing an innovation policy.

Mentions of intellectual property rights are relatively muted in this part of Biden's platform.

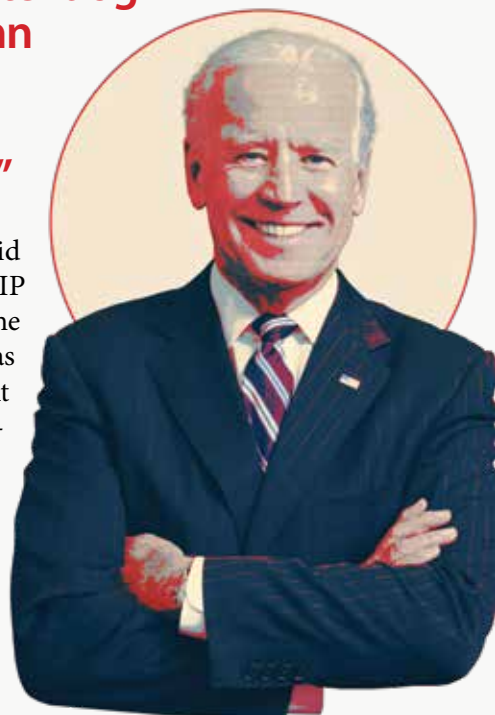
In discussing procurement commitments, Biden's campaign indicates that it will commit to future purchases in advanced industries to create new jobs and "protect our intellectual property and national security from American adversaries that have gone unaddressed by Trump."

Elsewhere on this page, Biden indicates he will "fight back against unfair trade practices and the theft of American intellectual property" and "confront foreign efforts to steal American intellectual property" better than President Trump. The Biden campaign says Trump's "Phase One" deal to relax trade tensions with China allowed cyber attacks and forced technology transfer to continue in that country.

Biden's campaign platform discusses the protection of American IP from foreign actors abroad, but there's no indication he's willing to take on what IP Watchdog founder Gene Quinn termed the "willful dismantling of the U.S. patent system."

However, this lip service paid to the prospects of American IP owners begs a question about the elephant in the room: Biden was vice president to former President Barack Obama, whose administration was arguably not kind to the most vulnerable stakeholders in America's intellectual property system.

The America Invents Act was passed into law with great



Continued on page 44



Continued from
page 42

Kappos has spent years researching data on SEPs. He said the reason hold-out is a bigger problem comes down to simple math.

“There are many, many, many more implementers than innovators in standard setting, and that plays out in the data.

“Nine firms in 3G/ 4G (wireless mobile telecommunications technology) made over 10,000 contributions that were responsible for 80 percent of the contributions, when there are literally hundreds and hundreds of firms taking advantage of the standards.

“That’s not to say anyone’s a bad guy or a good guy—but just to add, facts matter. I hope we’re rediscovering that right now, and these are facts that we all need to be aware of.”

“President-Elect Biden comes from a background where he (understands) IP.”

—DAVID KAPPOS

Improved policy statement

One of the pillars of Delrahim’s New Madison Approach was the “welcome new” Joint Policy Statement on Remedies for Standards-Essential Patents. It was issued by the Department of Justice, the United States Patent and Trademark Office and the National Institute of Standards and Technology.

This document replaced the 2013 Joint Policy Statement—which Kappos was heavily involved in creating.

“You learn things in five to six years, and what we learned was that the things we thought were problems in 2012, when the former policy was devised, were not problems,” he said.

At last year’s IPWatchdog Patent Master’s Symposium: “Standard Essential Patents: Striking a Balance Between Competition and Innovation,” Kappos elaborated on that point. He recalled that he signed off on the 2013 Joint Policy Statement, felt it was thoughtfully and heavily negotiated and edited, a good document and a compromised agreement.

Continued from
page 43

support from the Obama Administration, creating a series of patent validity proceedings at the Patent Trial and Appeal Board that have been very controversial because of the incredible burden those PTAB trials have forced upon patent owners seeking to vindicate their IP rights against infringers.

There is a strong sentiment among well-versed observers of the U.S. patent system that Obama’s approach belied an anti-patent bias that will continue to infect his legacy. As IPWatchdog founder Gene Quinn wrote in a December 2016 article excoriating the Obama Administration’s joint strategic plan for IP enforcement between 2017 and 2019:

“Simply stated, the Obama Administration can write all they want about the importance of the patent system and how patents are critically important for innovation, but the reality is that the future of American innovation has been forfeited (or at least heavily mortgaged) by a calculated, intentional, and willful dismantling of the U.S. patent system for the benefit a handful of politically well-connected companies

that helped President Obama get elected and then re-elected.”

Biden’s campaign platform discusses the protection of American IP from foreign actors abroad, but there’s no indication that he’s willing to take on what Quinn termed the “willful dismantling of the U.S. patent system” for the benefit of the enemy within, those “handful of politically well-connected companies” that were so helpful to Obama’s own political ascendancy.

End of ‘Iancu Effect’?

Further, patent owners who rely on certainty in their intellectual property rights would be correct to worry about losing improvements to clarity in agency practices at the USPTO that have been implemented under the Trump Administration by current USPTO Director Andrei Iancu.

Having inherited the direction of a USPTO that under former Director Michelle K. Lee many felt had largely lost touch with the realities facing patent applicants, Director Iancu has been a source of great optimism for IP

But he said he stepped back after Delrahim's announcement in 2018 that he planned to withdraw from the statement, and reconsidered his view.

"I was defending the IP system given everything we knew at the time," Kappos said. "I didn't think the guidelines were anti-innovation; I thought they were balanced.

"But in stepping back, I realized between 2013 and 2019 we've learned a lot. Multiple empirical studies have shown us that the phenomena on which we based the guidelines ... aren't occurring. There is no evidence of our predictions."

Kappos said the new policy statement reasserts the primacy and opportunity of patent holders to obtain injunctive relief, such as in Germany and China. 📍

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



stakeholders because of his dedication to clarifying Section 101 patent-eligibility.

The 2019 subject matter eligibility guidelines promulgated by the USPTO, for example, have been lauded as a much-needed step toward resolving the Section 101 mayhem.

However, concerns about the limited impact of the Iancu Effect in the U.S. patent system are exacerbated with a Biden presidency looming. It's unlikely that Director Iancu will remain at the USPTO under Biden, and we're left to guess which political ally and/or vested interest will take the reins once Iancu is gone.

Ultimately, we'll have to wait and see what Joe Biden's America actually portends for the U.S. patent system. But so far, it appears that patent and IP rights are not high on Biden's agenda. 📍

Steve Brachmann is a freelance writer located in Buffalo, N.Y., and is a consistent contributor to the intellectual property law blog IPWatchdog. He has also covered local government in the Western New York region for The Buffalo News and The Hamburg Sun.



Classifieds

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 SEARCH SERVICES

High-quality, cost-effective patent searches for inventors, businesses, and patent attorneys. 103 countries searched. Copies of cited documents included.

Speak to an experienced patent researcher today for a free consultation or quote. Looking forward to hearing from you!

1-866-U-invent/1-866-846-8368 – Search@PlanetPatent.com
PlanetPatent.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

NEED A MENTOR?

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

www.Inventor-mentor.com

Best wishes, Jack Lander

IoT Corner

South African-based Africa Wildlife Tracking announced a partnership with satellite data provider ORBCOMM to help track endangered animals in the wild.

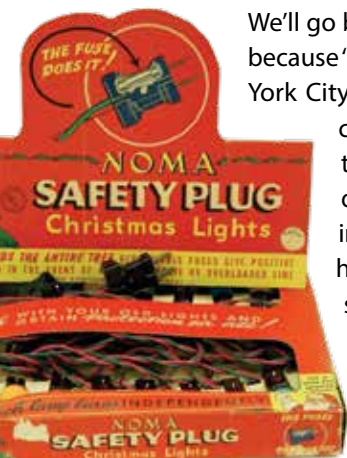
The system uses satellite tracking devices on large animals such as elephants that communicate with satellites and transmit near-real-time location data. Smaller animals are tracked by tagging them with radio frequency identification transmitters that communicate with the satellite devices on the large animals.

Tracking animals for conservation is especially important during the COVID-19 crisis; poaching is on the rise.

—Jeremy Losaw

Wunderkinds

We'll go back more than a century for this one, because 'tis the season: **Albert Sadacca** of New York City was a 15-year-old in 1917, when lit candles often were placed on Christmas trees as decorations. He helped end that dangerous practice with his idea of selling brightly colored strands of lights at his family's novelty store. Many sources say that Edward H. Johnson was the first to create electric Christmas tree lights in 1882, but the Library of Congress says Albert was the first to popularize the idea of selling the lights.



What IS that?

The **Umbrella Hat** is advertised as being useful for fishing, hunting, gardening, and protection from harmful ultraviolet sun rays. And if you tilt your head just right, you might be able to pick up Netflix.

21,153

The number of applications for copyright registrations filed in 2019 per BananalP Counsels, an increase of 3,126 from 2018.

WHAT DO YOU KNOW?

- 1 True or false:** Were it not for the objections of Johnny Cash's family, his 1963 hit "Ring of Fire" probably would have been used in a TV commercial for hemorrhoid relief.
- 2** Which popular singer filed a trademark last year for her own beauty products?
 - A) Taylor Swift B) Shakira
 - C) Selena Gomez D) Gwen Stefani
- 3 True or false:** China led all countries in international patent applications filed in 2019.

- 4** Which was patented first—the pogo stick, or the yo-yo?

- 5** The inventor of Liquid Paper had gone back to work as a secretary in 1951 to support her son, later famous as:

- A) Michael Nesmith of the Monkees
- B) Jim Morrison of the Doors
- C) Alice Cooper
- D) Wayne Newton



ANSWERS: 1. True; how could we make that up? June Carter Cash, who co-wrote the song, invoked her right to reject the idea on copyright grounds. 2.C. 3. True, per Statista.com, with 59,045 (America was a close second). But a large majority of five-year-old Chinese design patents are discarded due to high fees. 4. The yo-yo was patented in 1866 by James L. Haven and Charles Hittrick of Cincinnati Ohio, the pogo stick in 1920 in Germany by Max Pöhlig and Ernst Gottschall. 5.A.

DON'T MISS A SINGLE ISSUE!

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



Inventors DIGEST

ORDER ONLINE NOW
WWW.INVENTORSDIGEST.COM

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

NAME (please print)

ADDRESS

CITY/STATE/ZIP

E-MAIL

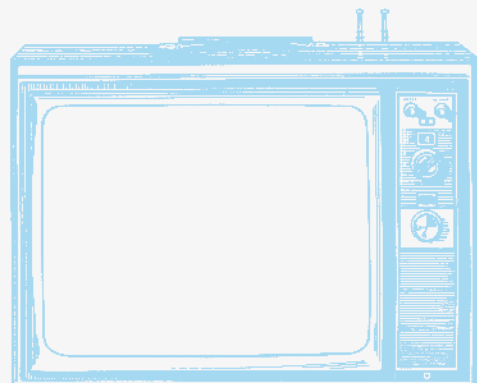
PHONE

referral code/referring subscriber (if applicable)

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

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

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

**SAVE THE
AMERICAN
INVENTOR**

