

# Inventors

JULY 2019 Volume 35 Issue 07

DIGEST

## Sweet Savvy

**MARIA SHARAPOVA'S**  
CANDY BUSINESS MAKES BIG NET GAINS

**Algorithm Action**  
MAX OUT THE LATEST  
FACEBOOK CHANGES

**Crowdfunding**  
BASIC STRATEGIES,  
MYTHS TO AVOID

**Remembering Napster**  
SHORT-LIVED SERVICE,  
LONG-TERM IMPACT

SUGAR POVA

W  
STR



\$5.95

PSBT 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](http://enventyspartners.com) or call us at 704-333-5335.

ENVENTYS  
PARTNERS



**EDITOR-IN-CHIEF**  
REID CREAGER

**ART DIRECTOR**  
CARRIE BOYD

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

**GRAPHIC DESIGNER**  
JORGE ZEGARRA

INVENTORS DIGEST LLC

**PUBLISHER**  
LOUIS FOREMAN

**VICE PRESIDENT,  
INTERACTIVE AND WEB**  
ELIZABETH BREEDLOVE

**FINANCIAL CONTROLLER**  
DEBBIE MUENCH

**SUBSCRIPTIONS**  
LOURDES RODRIGUEZ

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

Ad rates, subscriptions & editorial content:  
520 Elliot Street  
Charlotte, NC 28202

info@InventorsDigest.com www.InventorsDigest.com  
reid.creager@inventorsdigest.com



## Inventors Can Relate to Candy Icon's Story

Those of you who are of a certain age may remember Sydney J. Harris. A nationally syndicated columnist who died in 1986, Harris would occasionally write about "Things I Learned While Looking up Other Things."

The age of the internet search engine facilitates the discovery of accidental information more often than at any time in history.

For me, the most recent instance came while writing about the 2019 Sweets & Snacks Expo for this issue of *Inventors Digest*. I wanted to reference an iconic candy and its inventor, randomly choosing Reese's Peanut Butter Cups. And the more I read about Harry Burnett Reese, the more I was intrigued.

So many themes resonated that ring a bell with inventors. Among them: disappointment, determination, ingenuity and luck.

According to Andrew Reese, a grandson of the inventor and the author of "Reese's Peanut Butter Cups: The Untold Story" (2008), the fairy-tale saga begins in a place that would sound hokey in a Hollywood script: Muddy Creek Forks, Pennsylvania. Born and raised there, the inventor milked cows and worked the land on the family farm. It wasn't until the year he turned 37—1916—that he got his first break when he saw a newspaper ad by chocolateer Milton Hershey, who sought people to operate dairy farms that helped create his milk chocolate.

Hershey personally hired Reese, who dreamed of the wealth amassed by his mentor. In 1919 Reese started R&R Candy, manufacturing high-grade candy, chocolate almonds and raisins in a plant in Hummelstown, Pennsylvania. In order to get high-quality equipment, Reese raised money by issuing stock in a second business, Superior Chocolate & Confectionery.

The endeavor ultimately failed. He worked a series of odd jobs. But Milton Hershey always liked Reese and his work ethic, and rehired him. He went back to candy making in the basement of his home. By 1923, H.B. Reese Candy was incorporated; in 1927, he got another big break.

A commercial customer told Reese that he was having trouble keeping supplied with chocolate-covered peanut butter candy. Seizing upon the strong market for peanut butter and chocolate, Reese created his peanut butter cups in 1928.

In the face of the stock market collapse of 1929, World War II and its sugar rationing, Reese and his company thrived. Andrew Reese told *Investor's Business Daily* that "H.B. Reese . . . actively searched for better ways to automate his manufacturing processes and improve the quality of his products."

The Reese company merged with Hershey in 1963. Reese's six sons received Hershey common stock valued at \$23.5 million.

Candy is serious business. So are the lessons we can learn from some of its inventors.

—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](http://SaveTheInventor.com)**

**SAVE THE  
AMERICAN  
INVENTOR**





# Contents

July 2019 Volume 35 Issue 7



8



10



24



20



## ON THE COVER

Maria Sharapova, world-renowned tennis player and inventor of the candy line Sugarpova; photo courtesy of Daniel Boczarski (Getty)

## Features

- 26 Sweet Savvy**  
Sugarpova's Net Gains
- 30 Candy Land**  
Sweets & Snacks Expo

## Inventor Spotlight

- 20 Order is Restored**  
Makeup Junkie Bag
- 24 Perfect Scents**  
Sensorwake Alarm Clock

## Departments

- 7 Everybody's Talking**  
Conversation Pieces
- 8 Bright Ideas**  
Innovation That Shines
- 10 Time Tested**  
Napster's Short Life
- 14 Lander Zone**  
Elevator Going Up
- 16 Social Hour**  
Watch Those Algorithms
- 18 To Market**  
Crowdfunding Basics, Myths
- 32 Inventing 101**  
10 Keys to a Winning Product
- 34 Prototyping**  
Answers to Your Questions
- 36 Patent Pending**  
Drawings and Illustrations
- 38 IP Market**  
The Case of the Lonely Patent
- 42 Eye on Washington**  
Cooperation is the Key to Save U.S. Patent System
- 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](http://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):



*"Pop Goes His American Dream" (April 2017):*

What a nightmare! End the PTAB now!  
—ROBERT BEAR

*"Why Do Most Start-ups Fail?" (April 2018):*

Great points. What I discover is that many clients have a solution first before they have a customer. An inventor knows that a great MVP (minimum viable product) clearly articulates the need (pain point) of the customer.

—LISA@YOURINVENTORMENTOR.COM



## CONTACT US

### Letters:

*Inventors Digest*  
520 Elliot Street  
Charlotte, NC 28202

### Online:

Via [inventorsdigest.com](http://inventorsdigest.com), comment below the Leave a Reply notation at the bottom of stories. Or, send emails or other inquiries to [info@inventorsdigest.com](mailto:info@inventorsdigest.com).

## WHY THE SAD FACE, CONAN?

It's not a laughing matter when you're charged in court with stealing jokes. Such was the situation facing comedian and talk show host Conan O'Brien in a four-year legal battle that ended recently.

Jokes as intellectual property? Apparently so; in July 2015, veteran comedy writer Alex Kaseberg filed an infringement lawsuit, claiming that O'Brien stole five jokes from him.

U.S. District Judge Janis Sammartino rejected claims on two of the jokes in May 2017 but allowed the objections on the other three to remain viable. Two of the remaining ones were off-color jokes involving the Washington Monument and Caitlyn Jenner's transition; the other was a rather pedestrian effort that said New England Patriots quarterback Tom Brady should give his truck for being named 2015 Super Bowl MVP to Seattle Seahawks coach Pete Carroll for the latter's inexplicable play call that changed the game's outcome.

O'Brien's defense could have been seen as clumsy, not to mention insulting to the plaintiff. A pre-trial memo from the Conan

Defendants team said Kaseberg's jokes are "too unoriginal" to enjoy copyright protection—but if they are so unoriginal, why did O'Brien tell those jokes on his show?

Kaseberg told the court that Conan Defendants had stolen several jokes that he had posted on Twitter and on his blog, and ignored messages he sent to O'Brien's show about the similarities. O'Brien claimed that neither he nor his staff even saw the jokes.

On May 9, O'Brien's production company Conaco LLC announced a settlement with Kaseberg, who had sought \$450,000 in damages. The trial was to begin in San Diego on May 28.

O'Brien cited the mounting toll of legal bills as the reason for the settlement, but in fact his team may have seen the writing on the wall:

Conaco's arguments that Kaseberg lied in his applications to the copyright office



and that Kaseberg wasn't forthcoming during discovery were rejected on Nov. 15. The Times of San Diego referred to the O'Brien team's motion as a "Hail Mary."

The dispute shone a light on the issue of joke theft and infringement. Before the settlement, Vanity Fair speculated how the case could have an impact on comedy writing:

"The topic of joke theft has become an increasingly thorny and complicated one in the age of social media, when each and every major news development inspires a flurry of oft-similar jokes on channels like Twitter. ... Should Kaseberg emerge victorious, the decision will surely make monologue writers' frenzied jobs more complicated."

Kaseberg wrote that he was happy a settlement was reached. "If Kim Kardashian and Paris Hilton can settle their feud, we can, too. Although, in this scenario, I am not sure who of us is which."



# BRIGHT IDEAS

## RoadWayve

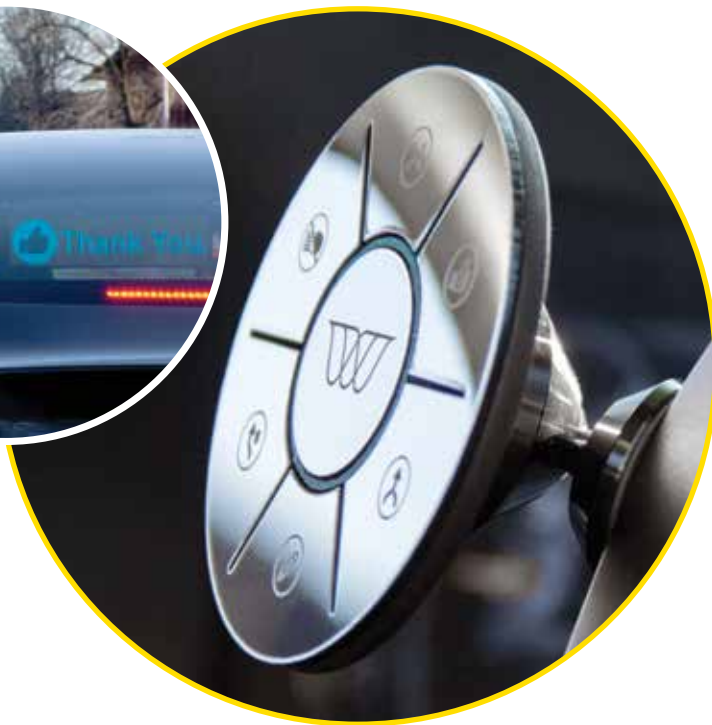
### DRIVER MESSAGE DISPLAY

[producthype.co/roadwayve](http://producthype.co/roadwayve)

Built around a bright, pixel-dense LED display, RoadWayve produces high-resolution messages that are visible to drivers up to 50 feet away and in most weather conditions.

The device features a user-friendly setup, dedicated remote control and runs on built-in battery car power. Simply install the LED message board on your car's rear window, turn on the Bluetooth remote control, download the mobile app and connect via Bluetooth, and start sharing messages. Voice-activated messages include Thank you, I'm sorry, Turn off the high beams, Let me merge, and Go around me.

RoadWayve will retail for \$199 and be shipped next July to Rewards backers.



## Outlery

### COLLAPSIBLE CUTLERY AND CHOPSTICKS

[outlery.com](http://outlery.com)

Outlery is a convenient, eco-friendly way to have eating utensils on the go. The container of disassembled chopsticks measures 80mm by 24mm, the cutlery 63mm by 82mm.

Outlery's reusable cutlery material is stainless steel; its box is made of recycled tin plastic. More than 80 billion pieces of plastic cutlery and chopsticks are thrown away each year, as well as having BPA that can cause cancers and infertility. Wooden cutlery eliminates about 20 million trees annually.

The full set with cutlery and chopsticks will retail for \$91. Shipping for Rewards backers will be in October.



**Senspad**  
CONNECTED,  
PORTABLE DRUMKIT  
[senspad.com](http://senspad.com)

Senspad lets you improve your dexterity, coordination and precision on the drum pad. You can connect several Senspads to create a genuine portable drumkit.

Each Senspad weighs less than 2.5 lbs. It is compatible with any digital audio workstation/music software for Windows, Mac, Iphone, and Android devices accepting midi signals. You can also connect via USB port. Insulate your acoustic drumkit and transform it into a connected one by putting your pads on top of your acoustic drumkit elements.

Senspad will retail for about \$190 U.S., with planned shipping for crowdfunding Rewards backers in March.

**“Innovation is an  
evolutionary process,  
so it’s not necessary to  
be radical all the time.”**

— MARC JACOBS

**SKYE Footwear**  
SNEAKER-BOOT HYBRID  
[skyefootwear.com](http://skyefootwear.com)

Among the listed benefits of this versatile footwear: lightweight; ergonomic engineering; made from sturdy materials; slip-on style; recycled materials; waterproof/snowproof; cushioned collar; temperature regulation; hidden zipper; no-tie lace; odor control footbed; ultimate grip; Vegan friendly.

The boot comes in two styles. The Stnley combines a traditional hiking boot appearance with the simplicity of sneakers to keep feet dry. The Pembrtn marries the slip-on sneaker style with boot functionality to keep feet warm and comfortable.

SKYE will retail for \$200, with planned October shipping for Rewards backers.



# Short Song

UNVEILED 20 YEARS AGO, NAPSTER WAS A BRIEF BUT POWERFUL MUSIC INNOVATION **BY REID CREAGER**

**IT BEGAN IN AN INTERNET CHATROOM.**

Such a scenario conjures any number of images, ranging from an unlikely love story to an episode of “Dateline: Secrets Uncovered.” This story of two teenagers’ influential invention probably falls somewhere in the middle.

Shawn Fanning turned 18 in 1998, the year he mentioned in a chatroom that he was working on software that would enable people to share music online for free. This wasn’t a lark for the nappy-haired dropout from Boston’s suburbs: He holed up in

his uncle’s office for days at a time, his obsession with writing the correct computer code reaching 60 straight hours at one point because he was afraid some person or company would execute his idea first.

His goal was a program in which people could utilize each other’s hard drives to share their MP3 music files. “It was something that provided a better, more reliable and fun way for people to share music and see each other’s music collection,” Fanning told the BBC World Service. “For the first time, this full history of recorded music was available online to everyone instantly.”

(As with virtually all “vintage” internet endeavors, Napster required more steps than its descendants



Shawn Fanning had the code complete by spring 1999, and Napster was launched that June. By October, the program had 4 million songs in circulation.





today: You had to download the software; mark the directory that you stored your music files as “shared” for other Napster users’ access; connect to the internet; access the Napster software, then type in the name of the song or artist you sought. Napster connected you with other users who had a copy of the song, and let you download it.)

Chatroom mate Sean Parker was intrigued. Almost a year older than Fanning, Parker started learning computer programming from his father in Virginia on an Atari 800 at age 7. His talent for hacking was such that at 15 he hacked into the network of a Fortune 500 company, was caught by the FBI, and was sentenced to community service. He was once offered an internship with the Central Intelligence Agency.

The two ultimately met in person. Parker was able to round up \$50,000 from potential investors, and the young entrepreneurs moved to California.

### Instant impact

Fanning had the code complete by spring 1999 and hired some chatroom friends as staff. Napster was incorporated that May and launched in June. By October, the program had 4 million songs in circulation.

It also had fast, formidable and organized opposition. Although supporters of the service claimed that it helped artists by making their music more accessible, detractors saw it as virtual theft.

In August 1999, when Napster had only a few thousand users, the Recording Industry Association of America notified Napster that its business model was a violation of their members’ copyrights. When Napster did not comply with the RIAA’s suggestion that it use proper legal channels to get permission to use copyrighted materials, the latter filed suit in December 1999.

What Fanning knew and when he knew it was an important issue in the suit. But Ali Aydar, a friend of Fanning’s from their Massachusetts days, told CNN: “He didn’t even understand the legal issues involved. It was such a cool idea that he never once stopped, never really came up for air.”

The RIAA case—specifically *A&M Records, Inc. v. Napster, Inc.*—was soon dwarfed in media attention by a legal complaint from a high-profile band. Metallica had recorded an alternative mix to its song “I Disappear” but had never officially released it—only to learn the song was available for free on Napster.

Not only did Metallica file suit in April 2000, it reportedly tracked down the names of 335,000 Napster users who had shared the band’s music and asked Napster to ban the group from the service. Napster complied. Dr. Dre sued as well.

## LIFE AFTER NAPSTER

Cofounders Shawn Fanning and Sean Parker have remained compelling public figures since the service shut down in 2002.

### Fanning

**2003:** Opened Snocap, a digital media marketplace. One of his partners was Jordan Mendelson, Napster’s chief architect.

**2006:** Developed Rupture, a social networking tool designed to publish gamers’ individual profiles to a communal space.

**2008:** Appeared in a Volkswagen commercial, directed by Roman Coppola, in which he made fun of his file-sharing past.

**2010:** Started Path.com, a social networking-enabled photo sharing and messaging service for mobile devices.

**2011:** He and Parker reunited to form Airtime, a live video website with real-time sharing and communication.



### Parker

**2002:** Cofounded Plaxo, an online address book and social networking service to integrate with Microsoft Outlook.

**2004:** Joined Facebook as its first president but has since left and criticized it heavily, calling it addictive and a “social-validation feedback loop.”

**2005:** Arrested but not convicted on charges of cocaine possession.

**2006:** Became a managing partner at Peter Thiel’s Founders Fund.

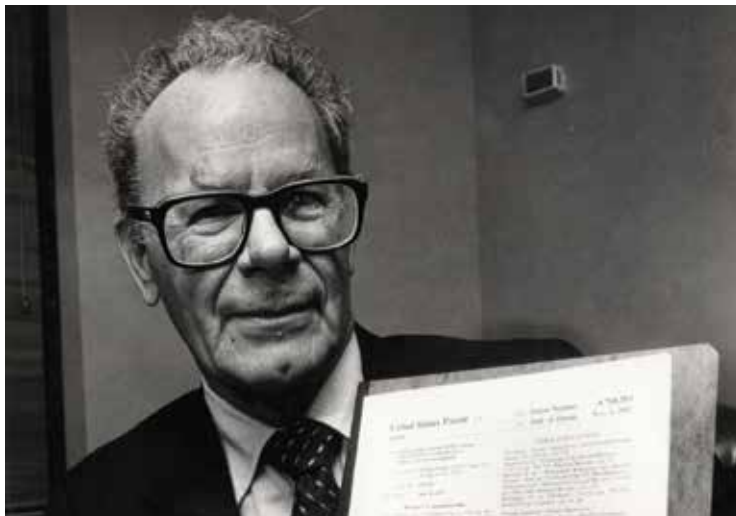
**2010:** Criticized Justin Timberlake’s portrayal of him in “The Social Network,” calling the movie a “complete work of fiction.”

**Has donated** \$600 million to launch the Parker Foundation, focusing on funding programs in life sciences, global public health and civic engagement; pledged \$24 million to develop the Sean N. Parker Center for Allergy Research at Stanford; donated \$4.5 million to support a malaria-elimination program at the University of California San Francisco’s Global Health Group.



## Brief peak

By its February 2001 peak, Napster had an estimated 80 million registered users. High-speed networks in college dormitories became overloaded due to the heavy traffic consisting of MP3 file transfers, to the point where many universities blocked Napster's use.



## INVENTOR ARCHIVES: JULY

**July 17, 1920: Gordon Gould**, an American physicist who is widely credited with inventing the laser in the late 1950s, was born.

For three decades, Gould fought with the United States Patent and Trademark Office to get patents for the laser and related technologies. He also fought with laser manufacturers to enforce the patents he subsequently received.

Gould, who eventually won millions of dollars in royalties, was inducted into the National Inventors Hall of Fame in 1991. He died in 2005.

Meanwhile, publicity from the court cases almost seemed like catnip to copycats. Limewire, Gnutella, Kazaa and Grokster were among those who tried to cash in on the notion of a music file-sharing program. Meanwhile, sales of music CDs, in particular, plunged—which was a serious blow to Napster's case.

The major hit to record industry sales in 2000 resulted in a reported 18,000 individual Napster users being sued. Fanning (a *Time* magazine cover subject in October 2000) and Parker were now wealthy media stars whose 15 minutes of fame were clicking along furiously.

In the same month that Napster's users totals peaked, a U.S. federal appeals court ruled for the RIAA in the lawsuit—and the service was doomed almost as quickly as it began. Napster shut down its server in July 2001, reopened and tried to become a subscription model, but its moment had passed.

Parker was forced out at Napster amid controversy over a memo in which he allegedly referred to the program's users as "pirates." Fanning bolted. Napster ceased operations on Sept. 3, 2002, its name eventually taken by music provider Rhapsody.

The following year, Apple's iTunes Store made it possible to legally acquire copyrighted music online. Since then, other sites such as YouTube and Spotify provide music for audiophiles—as well as money to music labels via subscriptions, advertising or licensing.

Despite its meteoric rise and fall, Napster has a permanent place in innovation and internet history. It has often been called the fastest-growing business of all time; perhaps more important, it revolutionized the music industry and forced it to adjust to the commercial realities of the internet age. 📺

## Quick Patents®

### Patent Options:

1. ~~Hire High-Priced Attorney~~
2. ~~Write my own patent application~~
3. Visit www.QuickPatents.com

**Low Fixed-Fee Patent Practitioners**  
[www.QuickPatents.com](http://www.QuickPatents.com) ~ 800-505-5610



**Shop Japan®**

Have an innovative product?  
 Want to bring it to Japan?

**We are looking for the next  
 big million-dollar hit!**

Over 25 years of omni-channel  
 brand building in Japan.

Experts in advertising and media planning.

For more information visit our website

[www.oaklawninvent.com](http://www.oaklawninvent.com)



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](http://www.edisonnation.com/ASOTV)



# Elevator Going Up

30-SECOND SPEECH CAN BE THE BEGINNING OF A LONG LICENSING OPPORTUNITY **BY JACK LANDER**

**IMAGINE THIS SCENE:** Through careful planning and patience, you have managed to get on an elevator with the vice president of marketing for a prominent tool producing company.

You know his office is on the 14th floor, so you have approximately half a minute to make your pitch for the tool you've invented and hope to license.

Now what?

If you're like most inventors, you'll clear your dry throat and come out with a statement such as: "Um, I have an invention I want to tell you about." But strangers seldom care about what *you* want.

## Climbing the steps

No matter how you start your "elevator speech," it's not likely to be welcomed. The only way you'll get a willingness to listen is by creating a vision of a new product that will make a profit for the VP's company.

Half a minute isn't nearly enough time to sell an idea to someone, of course. But the objective is to get the listener to ask questions; to want to go deeper into the nature of your product; and to be convinced it could increase the company's revenue and profits.

Use this time-honored formula that all good ad writers and sell sheet preparers use:

- Attract attention
- Arouse interest
- Create desire
- Call for action

In other words, break down the sales pitch into four objectives and concentrate on them one at a time, thinking only of the narrow purpose of each.

## Getting a dialogue

You may have noticed that the elevator speech is a spoken version of the sell sheet. The main difference between them is that you will have a photo of the product on the sell sheet, and you'll have to create an image in words for the elevator speech. Thus, Step 1 might sound like this:

"I have developed a novel, manually operated tool that every sheet rock installer will benefit from. May I tell you more about it?"

The VP shrugs and nods, without evident enthusiasm. No dreams of glory yet, but at least you've made eye contact. You have accomplished "attract attention."

You begin again. "My tool has been tested by a number of tradesmen, and they all agree it works great and saves them significant time."

"So, what does it do? How does it work?" the VP says. Check off "arouse interest" from your list.

You explain the tool's operation using hand gestures. He frowns knowingly, nodding his head just a bit.

You go on. "The fellows that tested it say that it will enable them to lay up at least another two or three sheets a day. Many of these guys get paid by the number of sheets they install. They can't wait until it is on the market. The utility patent has been filed, and it's available for license."

His eyebrows go up, and he's nodding. You have begun to "create desire," which is your objective. You know you can't conclude any deal on the elevator—so now, the "call for action."

"How can we arrange for me to show you the tool and demonstrate its use in a video?"

The elevator is slowing. The door opens. "Come with me. I'll introduce you to my administrative assistant. Make the arrangements through him."

## Meeting preparations

Mission accomplished. You can go off script now and say your good-byes. But that doesn't mean you can wing it at the next meeting.

Prepare again, using the four points that have gotten you this far. You'll probably be talking to persons you haven't met before.

Write and rehearse what you intend to say as you introduce your product. Try to anticipate every conceivable question. Write them down; craft your answers in a way that suggests a profitable new product.

You'll probably be addressing two or three others as well as the elevator VP, so you won't have the same control of the meeting that you had in the elevator. On the other hand, such meetings may be friendly, informal and even relaxed—but don't count on it.

Now, let's consider how you use the elevator speech in other ways. First, it's very unlikely that you'll ever use it in an elevator. The elevator event is merely an effective scenario for visualizing the need to give a quick, on-the-spot answer in *any* situation where you need or want to pitch your product and you don't have a sell sheet handy.

The sell sheet is nearly always the preferred way to introduce your product. When we craft a sell sheet, we go over and over it until we can't improve it anymore. And a sell sheet has a photo of your product.

Also, a sell sheet is a "hard" record, whereas conversational memories fade quickly. Finally, a sell sheet can circulate unedited to several other readers who may have input to the licensing decision. Conversations tend to change according to the biases of the persons relaying them.

#### And remember

- What you're trying to license or sell is a product, not an invention. The word "product" is the vocabulary of your licensee. The word "invention" is the language of creators and dreamers. You're aiming for a licensee. Talk their language.
- Always carry copies of your sell sheet in your purse, briefcase, backpack, breast pocket of your suitcoat, car, even folded in the back pocket of your jeans.
- You are bound to encounter unanticipated situations where you would like to explain your product. If you don't have a sell sheet handy, you'll need to explain it verbally. That's where the elevator speech is essential. Without its discipline, you are apt to stumble, wander, and talk about inconsequential.
- For situations where whipping out your sell sheet is impractical, use your elevator speech. Write it out, questions and answers. Emphasize increased sales and profit for the licensee. Emphasize benefits for your product's eventual customers. Perfect it.
- Don't distract your potential licensee with stories about the eureka moment when you got the idea, and how all of your friends and your mother think the invention is great. That stuff is irrelevant and boring to busy persons.
- Rehearse. Have a friend ask the questions and practice your answers ... more than once. You're vulnerable when you have to ad-lib an answer.

Remember, it's a matter of perspective. Emphasize theirs, not yours.

How often we see email contact designations such as sales@xxxx.com. I don't want to be *sold* anything;



**Break down the sales pitch into four objectives and concentrate on them one at a time, thinking only of the narrow purpose of each.**

I want to buy, and of my own volition. The better wording would be customerservice@xxxx.com. That's our perspective, and it's non-threatening.

The same thinking should be used in trying to convince someone with spoken words, or words on paper. The first thing you mention is the benefits that accrue to the potential licensee. Your desire to conclude a licensing agreement should come last, and preferably when your prospect brings up the subject. 🎯

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



# Watch Those Algorithms

WHAT INVENTORS SHOULD KNOW, AND DO, ABOUT FACEBOOK'S LATEST CHANGES **BY ELIZABETH BREEDLOVE**

**O**NE OF the challenging things about using social media as part of your marketing strategy is that the way the most popular networks work is constantly changing.

Platforms such as Facebook, Instagram and Twitter frequently update the algorithms that determine what content is shown in users' feeds. This means that a strategy that works well one month may cause a dip in engagement a few months later. Therefore, it's important for inventors to pay attention to any sweeping changes these platforms make and adjust their strategy accordingly, so your content can be seen.

In May, Facebook announced a few changes to the way it was ranking information to fill the news feeds:

"As we've said in the past, it's not about the amount of time someone spends on Facebook, but rather the quality of time spent. That means making sure people see what they want to see—whether that's posts from family and friends or news articles and videos from Pages they follow.

"To do this, we try to understand what people are already doing on Facebook—what they like, comment on and share. We also use surveys to get more context about the posts people want to see and who they want to see them from. Today, we are announcing two ranking updates based on surveys we've conducted: one prioritizes the friends someone might want to hear from most and the other prioritizes the links a person might consider most worthwhile."

Later in the month, Facebook added:

"We know that friends are not the only reason people come to Facebook. Many people come to see the latest from the Pages they follow and the groups they are a part of. In addition to surveying people asking them which friends they were closest to, we started two additional surveys asking people 1) how interested they are in content from a specific Page they follow, and 2) how important a specific group they've joined is to them.

"Using these survey results, we have updated our algorithm to prioritize the Pages and groups we predict an individual may care about most. Some of the indicators of how meaningful a Page or group is might include how long someone has followed a Page or been a part of a group; how often someone engages with a Page or group; and how often a Page or group posts."

To summarize, Facebook updated the algorithm to prioritize friends, links, pages and groups users want to hear from most.

## Making it work for you

So, what does this mean for inventors using Facebook to promote their inventions?

At the most basic level, the best way to "beat" the Facebook algorithm and make sure your content is seen is to post content that your audience finds interesting and valuable. If your content isn't meaningful, it's going to get buried by other more interesting posts.

Don't be intimidated, though. Here are a few ways to create content that is more meaningful and engaging, to ensure you're able to spread the word about your invention.

**Avoid engagement bait:** Gone are the days of posts asking users to "like if..." or "share if..." followed by some broadly applicable qualifier (for example, "Share if you'll be celebrating the 4th of July at the beach.").

Now, Facebook's algorithm picks up on these types of posts and views them as shameless engagement bait. You'll be penalized for using posts like this to get engagement on your posts. However, there are still ways to encourage engagement on your posts. For example ...

**Ask questions to drive engagement:** There's nothing wrong with encouraging discussion in the comments; Facebook wants users to interact with its platform, so





## Facebook updated its algorithm to prioritize friends, links, pages and groups users want to hear from most.

the algorithm won't penalize you for posting something that encourages comments.

Building from the previous example, instead of telling your audience to share your post if they're celebrating the holiday at the beach, include a question in your post such as, "How are you celebrating the 4th of July this year?" Engagement is still a major factor in how Facebook ranks posts, so keep this in mind and craft posts with which your users are likely to engage.

**Use native content:** One thing that hasn't changed with Facebook's algorithm updates is the platform's prioritization of native content.

Think about it this way: Facebook prefers not to drive content offsite. Those who build the algorithm have to balance content users care about with the need to keep users onsite to increase advertising revenue, so interesting native content will always win. Look for ways to use video, photos, polls and other native options to publish content your users will care about.

**Use live video:** If you're unsure of how to implement more native content into your social media marketing strategy, consider Facebook Live. Facebook Live has many benefits beyond just being native content:

- It provides a much more personal, perhaps behind-the-scenes look at your company by being more casual and letting users respond to you in real time, and vice versa.
- It allows you to build a connection with your audience.
- It's cost effective because you won't have to worry about expensive video production costs.

- It's likely to be seen in the News Feed, and users may also get a notification that you're live. The benefits are nearly endless.

**Use Facebook Groups:** Don't forget an important part of Facebook's algorithm update, Facebook groups. Facebook groups are all about conversation and discussion, so they are a great place to create interesting, valuable and engaging content. Consider starting your own group for fans of your invention to connect with each other. If others are posting and interacting with content centered around your product, the word will spread and you'll grow your audience.

**Use Facebook Ads:** Although Facebook does care about high-quality organic content, the platform is still a business that makes money from ad revenue. Therefore, if you want to get the most out of your time spent managing your social media, combine organic content with Facebook Ads.

Facebook offers many different types of ads. To get the best ROAS using these, you'll most likely want to work with a Facebook ad agency. However, if your goal is to manage your own ads, try boosting an organic post that is already performing well; throwing some ad spend behind it should help it perform even better. 📌

**Elizabeth Breedlove** is marketing strategy manager at Enventys Partners, a product development, crowdfunding and inbound marketing agency. She has helped start-ups and small businesses launch new products and inventions via social media, blogging, email marketing and more.



# Crowdfunding Basics and Myths

EVEN WITH GOOD ASSETS ON YOUR PAGE, SIMPLY BUILDING A CAMPAIGN IS NOT ENOUGH **BY HOWIE BUSCH**

**T**HERE ARE many misconceptions about crowdfunding sites, the best known being Kickstarter and Indiegogo. But first it's important to review some of the basics, because crowdfunding is a great way to get your product to market (see the February 2017 *Inventors Digest*, which featured a crowdfunding theme).

One of the greatest things about crowdfunding is that it turns the traditional manufacturing model on its head—at least when it comes to consumer products.

In traditional manufacturing you have an idea for a product, make a prototype and then get quotes from factories for pricing. They'll tell you their MOQ (minimum order quantity), the minimum number of pieces you must order before they'll even make it for you.

So let's say the product costs you \$10 each and their MOQ is 5,000 pieces. Because you really believe in your product, you order the 5,000 pieces.

That's \$50,000. And you have to pay at least half of it upfront so the factory can purchase the materials to get started with production.

When your products are ready, you have to pay the factory the rest of the \$50,000 you owe, ship the products to the United States, and find a fulfillment center to warehouse them and send them out. You'll typically pay monthly storage and a variety of other fees.

In addition to all of the other costs that include prototypes/samples, website, incorporation documents, lawyer's fees, patents and more, you now have to first try selling the thing to see if anyone even wants it.

So you're in for at least \$75,000-\$100,000—and you don't even know if anyone wants to buy the product. Pretty insane, no?

## Favorable math

Enter crowdfunding. It changes that dynamic by enabling you to first test the market to see whether there's any demand for it. If there is, now you can go to a factory with an actual order in hand—and the money to pay for that order.

That's right. If you hit your funding goal, you now make the product. Your backers or funders will have already paid you.

So even if you only sell 1,000 or 2,500 of your product, you'll still probably have enough to pay for all of your manufacturing.

That's a smarter way to do business. It really reduces your risk. Your only risk now is your time commitment working on your campaign and the money you spend to prepare it: for images, video, landing page, etc.

Now, on to those crowdfunding myths.

## Myth 1: People are just donating money or getting equity/stock in your company.

No. I went through this with my own Kickstarter campaign. When I asked my friends if they knew what Kickstarter was, 90 percent said they did.

When I asked what they thought it was, the two most common answers were that they were getting equity in my company, or they were basically just giving me the money in the form of a donation.

It's actually neither. It's simply pre-ordering the product so that you can now, as mentioned above, go to a factory with money in hand.

That's right. With Kickstarter and Indiegogo, people are just pre-ordering your product.

## Myth 2: Building a campaign on Kickstarter means people are likely to discover my product and I will hit my goal.

I call this the "If you build it, they will come" thought process. That may have turned out to be true about building a baseball field in Iowa in the movie "Field of Dreams," but I promise you that is no way to succeed with Kickstarter.

According to [statista.com](http://statista.com), the success rate of fully funding a project on Kickstarter as of April 2 this year was 36.84 percent.

I can't tell you how many inventors over the past several years have said to me that Kickstarter is no good. "Why do you say that?" I ask.

And it's almost always the same response. "I did one ... and no one bought."

"Send me the link," I say. "I'd love to see it." And that's when it becomes clear why they didn't succeed.

Usually their page is decent looking; the images are fine, the video is OK (sometimes not). These are what I call “the assets”—important pieces of the puzzle.

But when I look at what they raised during their campaign, it's usually less than \$1,000 and sometimes even less. And they blame Kickstarter or Indiegogo.

To succeed with crowdfunding, you not only have to build it, you also have to get people excited enough to buy the tickets. Imagine if you were starting a new basketball, football or soccer team and they just started playing games. Would the seats be filled?

Of course not. You would have to let potential fans know about this new team through advertising, publicity and coordinated marketing efforts.

Succeeding at Kickstarter takes a lot of work before you ever hit the launch button. Sure, the prototype and assets are important and must be good, but if no one knows about them, how can you hope to succeed?

Most inventors are afraid to share their new products with friends, family and acquaintances for fear of being judged negatively. “What if it doesn't succeed?” they wonder.

But what if I told you, “If you don't tell your friends and family and involve them in the process, the odds are really high that you won't succeed”?

That's correct. Having a great idea and even executing it are only part of the battle. You have to tell all of your friends, family, neighbors and acquaintances about it. As you succeed, you will then tend to rise up Kickstarter's algorithm and have access to that traffic.

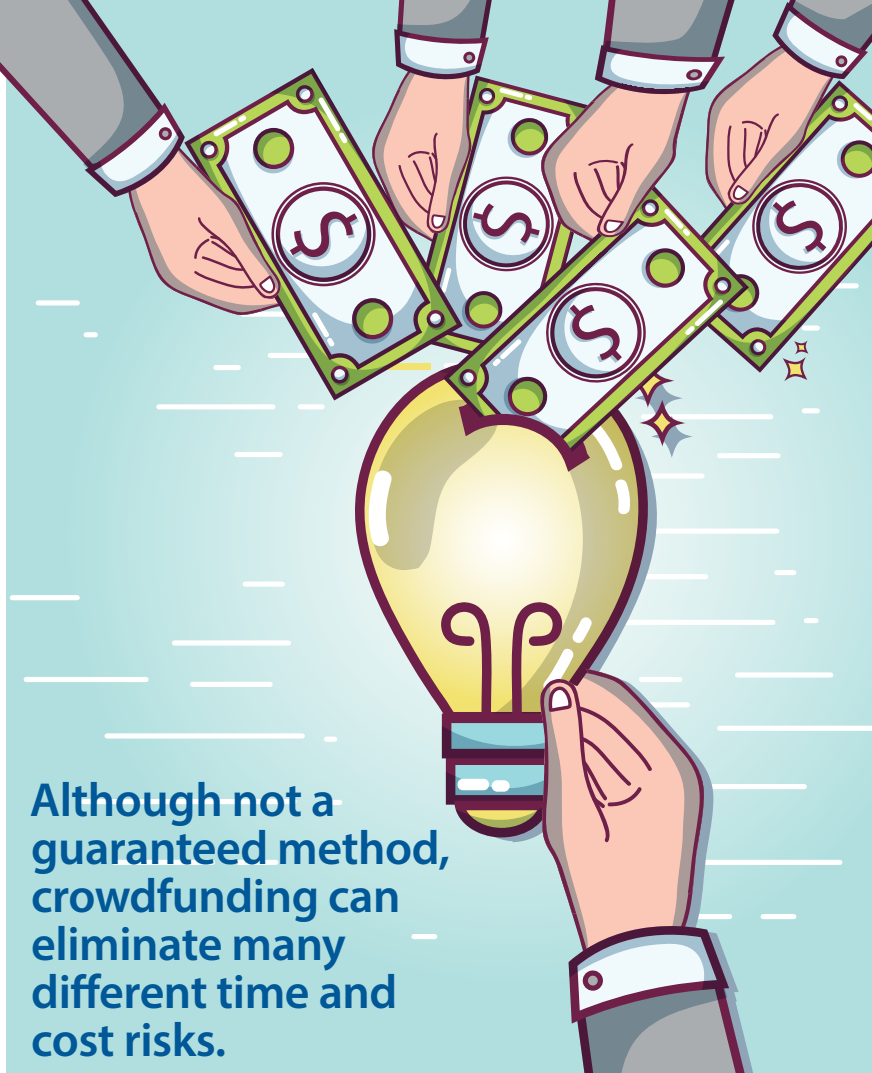
### **Myth 3: I should set my funding goal at the exact amount I want to raise.**

Actually, even if you need to raise \$50,000 to hit the manufacturer's MOQ, you are generally better off setting your funding goal artificially lower—somewhere around \$20,000-\$25,000.

You rise up Kickstarter's algorithm much faster if you hit a high percentage of your funding goal quickly. The quicker you get to that funding goal, the quicker Kickstarter regulars will see your campaign.

Even though I wanted to raise at least \$50,000 when I launched DudeRobe, I set my funding goal at \$25,000. When I hit that goal in two days, I then saw the benefit of Kickstarter traffic kicking in. I raised nearly \$70,000 selling a bathrobe in June.

Another reason that works is that people like to back a winning campaign. If it doesn't look like you'll succeed, people may not be inclined to back you.



Although not a guaranteed method, crowdfunding can eliminate many different time and cost risks.

### **Myth 4: I have to decide whether I want to license my product or do a Kickstarter.**

I know some companies that ran successful campaigns and then chose to license their product.

If you have a successful campaign and then don't want to continue after your first production run, you'll have a decent chance of licensing it because you've proven the market for a licensee and de-risked launching this product.

These are just some of the myths I've found when talking to entrepreneurs who either have done a campaign or are thinking about doing them. I'm a big fan of crowdfunding. It's such a great way to get your product to market.

In my next article, I'll share some tips and tricks to help improve your chances for success with crowdfunding. Don't hesitate to comment or ask questions, and happy inventing! 📌

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





# Order is Restored

MAKEUP BAG ENDS THE BLACK HOLE OF SEARCHING FOR SCATTERED COSMETICS

BY EDITH G. TOLCHIN

**A** WOMAN can never have enough makeup, except when it's scattered all around one's powder room—or worse, gathered from said powder room and strewn into a suitcase when preparing for a last-minute trip.

Here's a neat solution to the damage that smeared eye pencils and hastily spilled nail polish bottles can cause: the Makeup Junkie Bag, which is strong, washable and water resistant. It's pretty and stylish, too!

**Edith G. Tolchin (EGT):** How did the Makeup Junkie line come about?

**Meredith Jurica (MJ):** I am a speech pathologist-turned stay-at-home-mom-turned-Makeup Junkie creator and founder. I have always enjoyed makeup. It's just fun.

I had a lot of it, and I was tired of cosmetic bags that didn't deliver. If they were wide enough, they fell over, sending cosmetics tumbling about. As if I wanted more messes to clean up. If they were deep enough, they became a black hole where you couldn't find anything you need—you know, that favorite eyeliner that you can never find in the dark abyss of a deep cosmetic bag. If they were pretty, the interior was not water resistant or washable and it became dirty very quickly. We've all got one of those under our bathroom sink.

So naptime for the kids turned into craft time for Mom, and voila! I created something I needed, and apparently everyone else needed, too!

**EGT:** What are the unique features of the Makeup Junkie Bag?

**MJ:** Buckle up: My bag lies flat and the medial zipper allows the bag to gape open, which allows easy access to everything in it. That favorite eyeliner? It's right there. No more digging!

The interior is not only easily wiped clean, it is also water resistant. There is no other bag like this



**“We sell out within *minutes* every week when we upload a fresh restock to our website.” — MEREDITH JURICA**



on the market. The way these bags are made solves essentially every problem users have had with their cosmetic/toiletry bags.

Because these bags lie flat, organizing a suitcase, for example, is a cinch. You can pack more items and take up less room in your luggage. Leaky hairspray? No worries; the water-resistant interior keeps leaks from ruining your entire suitcase.

**EGT: Tell us about your initial prototypes.**

**MJ:** I created the first large bag based on my favorite eyeshadow pallet, and how many pallets I wanted to keep in the bag. I simply measured it, cut my fabric, and there I had it. I couldn't believe it!

My mother-in-law is the one who ever-so-patiently taught me to sew. I am so thankful to her for that. She is a gem. I posted a picture on my social media just as a “Look what Mom did today!” and before I knew it, it turned into friends asking me to make them one, to people asking me how to buy them! I was setting up tables at school events, church events, and they were all sell-outs!

My invention had essentially gone *viral* overnight! It all happened so fast; two years later, here we are. I am still in shock some days.

**EGT: How many different styles are you featuring? What is the retail pricing?**

**MJ:** The fabrics we use on our bags range from vegan crocodile leather to velvet to 7-oz. cotton. The leathers we use are all vegan. I also really love loomed fabrics. I am always looking at new fabrics to see what can work for this design.

Our bags come in four sizes: Mini (4x7”), \$32; Small (7x9”), \$36; Medium (8x11.5”) \$42; Large (9.5 x13) \$48. We are constantly adding new colors and fabrics to accompany our 11 core colors.

We also have a Mommy Junkie line with fun prints, as well as a Man Junk line. Don't want to leave the fellows out. The versatility of these bags has made them useful for so much more than just makeup.

**EGT: Are you manufacturing in the United States, or overseas?**

**MJ:** Initially, it was just me at my kitchen table sewing away, and my sweet husband, Chad, would help me fill orders. We make a really great team.

Eventually, I had to hire outside help to keep up with everything. Fast-forward to today: We currently manufacture here near Houston, Texas, mostly on site in our facility. We have recently expanded our facility but still use some offsite manufacturing, all here in the United States. We are working daily to grow our staff and keep up with the demand.

**EGT: Have you tried crowdfunding?**

**MJ:** No, I have not tried crowdfunding. My husband used the money he was saving for a down payment on a new vehicle to get this business going. So far, we are currently a self-funded operation.

**EGT: I understand you were featured on “Shark Tank.” How was that experience?**

**MJ:** The “Shark Tank” experience was life changing, and I'm very thankful to have been chosen to be on the show. Each time I made it to the next round was completely surreal, truly a once-in-a-lifetime opportunity. When I faced the judges, I felt confident in my invention and my business, and could not believe I had three offers to choose from. It was so hard coming home and keeping quiet until the show aired. (She struck a deal with Lori Greiner: Makeup Junkie Bag gets \$200,000 as a loan in exchange for 5 percent of the company. Greiner also receives 75 cents per bag in perpetuity.)

**EGT: How are you handling your PR?**

**MJ:** PR is currently handled entirely in-house. We have a social media team that handles all of our accounts, as well as monitoring email in the event customers have a question or issue that needs handling. Our team is always brainstorming ways to increase brand awareness while staying true to our vision.

Chad and Meredith Jurica, shown at the Season 10 premiere of “Shark Tank,” were thrilled she struck a deal with Lori Greiner.

Opposite page: The medial zipper on the Makeup Junkie Bag allows the bag to gape open for easy access to anything.



**EGT:** Please share your experience with patenting the Makeup Junkie bags.

**MJ:** I knew from the beginning, with as quickly as my makeup bags went viral, that I needed to patent my invention immediately. The patent process has been long and requires patience, but I felt like it was important to protect what I invented.

I'm like most people and wish that I could simply have had the patent overnight, but there is good reason behind the patent system, and we just have to trust that. I encourage everyone with a solid invention to start this process.

**EGT:** Will you be increasing your product line?

**MJ:** We are expanding our production line daily, and our branded lines. We have core styles but are often—sometimes even weekly—adding new colors and fabrics to our lineup. We are creating a sister brand that will be available soon. Be on the lookout for those. We can't wait to share those details with everyone. We have big things in store for this year.

**EGT:** What has been your biggest obstacle in product development?

**MJ:** Our biggest obstacle has been keeping up with the demand. Demand has steadily grown since I started as a one-man show. After "Shark Tank," no matter how many we make, the demand goes up quicker than we can make them. This makes

having my on-site facility with exceptional seamstresses so valuable. We sell out within minutes every week when we upload a fresh restock to our website. We are adding more machines to our fleet and hoping to get more bags in more people's hands.

**EGT:** Do you have any encouragement for novice inventors?

**MJ:** Never think "It can't happen to me," because darling, it most certainly can.

I was a stay-at-home-mom, just looking to make something useful for myself. If you've got nothing to lose, then try everything. I can't stress this enough.

I read somewhere that a river cuts through rock because of its persistence, not its intensity. Be persistent. Never give up even if you meet little failures and defeats along the way. ☺

*Details: [makeupjunkiebags.com](http://makeupjunkiebags.com)*

Books by **Edie Tolchin** ([egt@edietolchin.com](mailto:egt@edietolchin.com)) include "Fanny on Fire" ([fannyonfire.com](http://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](http://www.EGTglobaltrading.com)  
EGT@egtglobaltrading.com  
P.O. Box 5660 - Hillsborough, NJ 08844  
**845-321-2362**

### 2 GET A WEBSITE!

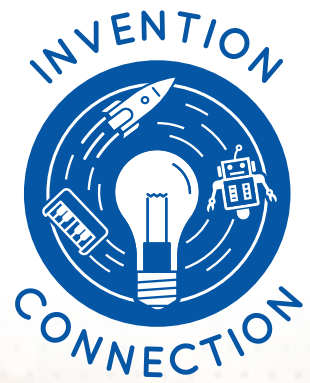
Contact Ken Robinson – While your order is being manufactured, you need to start working on your WEB PRESENCE! Get people talking about your product on Social Media (Facebook, Twitter, YouTube, Google+), get good search engine placement (SEO)!

[www.widgetsontheweb.com](http://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!



# RE-INVENTING the WHEEL?



From Toys and Apparel  
to Gifts and Electronics,  
**ABC's Invention Connection**  
**Is Your Playground**  
**for Discovery**

Participate in the largest  
juvenile products event in  
the Western Hemisphere.  
From baby gear and apparel  
to toys, gift and maternity,  
this award winning event  
covers baby to teen and all  
the children in between!

Meet prospective product  
manufacturers and licensors  
as well as obtain feedback on  
your product from domestic  
and international buyers.



**REGISTER NOW** for the ABC Invention Connection

[www.TheABCShow.com](http://www.TheABCShow.com) • contact: [Amanda@TheABCShow.com](mailto:Amanda@TheABCShow.com)



**OCTOBER 23 – 25, 2019**

Las Vegas Convention Center | Las Vegas, NV

# Making Perfect Scents

ALARM CLOCK EMITS A SOOTHING AROMA INSTEAD OF A SOUND

BY JEREMY LOSAW

**C**ONSTANTLY TIRED by his schoolwork and studying, 18-year-old Parisian student Guillaume Rolland found it difficult to wake up in the morning. Then he had his *ooh la la* moment.

He realized that if someone made coffee before he woke up, the strong smell from the brew was enough to rouse him gently from his sleep. That led him to think that an alarm clock would be much more effective if it emitted scent instead of sound.

Rolland started working on a prototype right away. In just a few days, he had built the first Sensorwake olfactory alarm clock.

The latest version of the Sensorwake is called the Trio, which features scent pods that release pleasing aromas into the air at your desired waking time. The alarm also has dynamic lighting and music to appeal to three senses; hence the name Trio.

The device can be set similarly to a standard alarm clock. There are nine main different scent cartridges available to customize the user's experience, with many more available.

## Humble beginnings

Rolland constructed that first prototype clock from an Arduino and found materials.

"I used an Arduino Uno because it's very easy to use," he says. "As an 18-year-old, I did not have any skills in electronic development. I connected electronic components from old cars, toys and Christmas gifts."

The first fragrance pod was made from essential oils distilled in his high school, via ingredients from his garden. The prototype was the perfect test bed for the concept.

The first big break for Sensorwake came soon after building the first prototype. Rolland found out about the Google Science Fair, a worldwide competition for inventors.

He entered his crude prototype but did not expect that it would lead anywhere. To his surprise, he was chosen as a finalist and was the first French based inventor so honored.

Although the competition offered no cash prize, Rolland had the opportunity to visit Google's offices in California. He received mentorship and great PR, a major validation for the concept.

"I consider the Google Science Fair as a trigger in the project. It allowed me to launch my product in the market and to make my dream a reality," he says.

## Push and momentum

In 2015, Rolland launched the first Sensorwake on Kickstarter and raised more than \$244,000. This allowed him to add people to the team and push towards manufacturing.

The buzz around the project helped lead to a partnership with Givaudan—a well-known, Switzerland-based fragrance and flavoring company that helped Rolland develop the scent release pods used in the manufactured device.

Rolland is no stranger to creating patented devices; he filed his first patent at 13 for a tea brewing robot.

**The Google Science Fair "allowed me to launch my product in the market and to make my dream a reality."** —GUILLAUME ROLLAND





The IP strategy for Sensorwake started with a French patent. As the company grew, additional patents were filed to give the company worldwide coverage on its technology and trademarks. Procuring IP has helped with marketing and building valuable assets.

The Sensorwake devices are manufactured in China. Rolland traveled to the factories and met with many potential manufacturing partners.

Fortunately, the pre-sales from his first Kickstarter campaign bolstered his initial order quantity and made the product more appealing to take on for reputable factories. It was intimidating for a young entrepreneur to open tooling for a brand-new hardware product, but the risk paid dividends.

Leveraging the success of the first generation of product, Rolland and his team overhauled the design. Dubbed the Trio, the new device added pleasing light patterns as well as relaxing music to the waking experience.

Designed with U.S. consumers in mind, the Trio was launched on Kickstarter last year and raised more than \$200,000. The first units were shipped to crowdfunding Rewards backers early this year.

All of the great work by Rolland and the Sensorwake team has led to a number of honors, including two Consumer Electronics Show Innovation awards. However, their biggest achievement is the recent acquisition of the company by Maison Berger Paris. The acquisition by the 120-year-old French fragrance company gives Rolland and his team additional resources and the challenge to build new fragrance delivery devices to be launched in coming years. 📦

*Details: [trio.sensorwake.com](http://trio.sensorwake.com)*

The Sensorwake has nine main different scent cartridges available to customize the user's experience, with many more available.

**Jeremy Losaw** is a freelance writer and engineering manager for Eventys. He was the 1994 Searles Middle School Geography Bee Champion. He blogs at [blog.edisonnation.com/category/prototyping/](http://blog.edisonnation.com/category/prototyping/).





to help  
moments.  
about  
reward  
childhood  
today. ”





# Sweet Savvy

MARIA SHARAPOVA'S INNOVATION AND DETERMINATION  
POWER HER THRIVING CANDY LINE **BY REID CREAGER**

**T**HE TOP-RANKED FEMALE TENNIS PLAYER in the world on five separate occasions, Maria Sharapova is beautiful, elegant, and willing to do the grunt work.

Her consuming passion for business's intricate details has paid off with Sugarpova, the candy company she launched in 2012. Sharapova's \$500,000 investment became a business worth a reported \$20 million last year.

"I still love to be involved in all the details of Sugarpova, whether that's taste-testing new flavors or designing the packaging for new product lines," she told *Inventors Digest*.

"I work directly with my Sugarpova team on every decision, from ingredient selection to manufacturing partners to everything in between. I won't lie, it's not easy balancing everything with my hectic tennis schedule, but it's so rewarding to see the tangible results—especially when fans share how much they enjoy the taste of our candy."

The unlikely notion of a slim, finely toned athlete starting a candy line is a tribute to Sharapova's innovative spirit. She traces her business to a habit she developed as a child in her native Russia.

"I have had a huge sweet tooth since I was very young, when I'd often reward a hard day of training with something sweet," she said. "And after doing some research on the candy business myself, Sugarpova felt like a no-brainer.

"I worked with my longtime agent, Max Eisenbud, to find the right manufacturing and retail partners and funded the company completely myself to get started. Something I've learned throughout my tennis career is the importance of building a strong team around you, and I'm lucky to have such great partners who help keep all the pieces moving."

A portion of all Sugarpova proceeds goes to the Maria Sharapova Foundation, her charity.

## Competitive instincts

The mainstream media often focuses on Sharapova's trademark grunt/scream as she attacks the tennis ball. ("I sound like an injured bird," she has said.) Her more important legacy on the court stems from her five Grand Slam titles; being the only Russian woman to hold a career Grand Slam (winning Wimbledon, the U.S. Open, French Open and Australian Open); and winning a silver Olympic medal in singles at the 2012 Summer Games in London.

Sharapova has made nearly \$300 million in prize money, appearances and endorsements since she turned pro in 2001.

Every grunt and success reflect a lifelong competitiveness that assumes nothing, even with each victory on and off the court. Her business strategy has been strongly shaped by her "humble beginnings" in Russia; she came to the United States in 1994 with \$700.

Maria Sharapova launched Sugarpova in 2012. Her \$500,000 investment became a business worth a reported \$20 million last year.



**“I have had a huge sweet tooth since I was very young ... after doing some research on the candy business myself, Sugarpova felt like a no-brainer.” —MARIA SHARAPOVA**

“I see my business as a starting point—as if I have nothing,” she told CNBC last year.

Starting from scratch in the food business was a challenge, but she would rather talk about what she saw as benefits. “I was able to approach product development almost as a consumer,” she told *Inventors Digest*. “I’ve always taken opportunities while traveling for tennis to try new sweets from around the world.

“When we first came up with the idea for Sugarpova, I thought about some of my own favorite candies—the flavors, the shapes, the packaging that drew me to them. That’s how we selected our manufacturing and other partners.”

### First steps

According to Eisenbud, Sharapova’s agent, the product name came suddenly from longtime candy industry fixture Jeff Rubin when he and Rubin had lunch. Sharapova, obsessed with quality, found a gummy bear that she said had the best taste of any candy she had tasted. She tracked it to a factory in Spain.

Next came the candy’s lip shapes, which Sharapova said was “genius and something you could have for so many different flavors.” In fact, that lip shape is trademarked (Registration No. 4408651, in 2013). Sunburst, purse and high heel shapes—as well as tennis balls—followed. Fun names for the original 12 flavors included Flashy, Flirty, Spooky, Cheeky and Smitten.

A keen student of branding’s importance, Sharapova was determined to see that Sugarpova’s packaging married fun with elegance. “Packaging and design have been a priority of mine since Day 1 of Sugarpova,” she said.

“My vision for the company was to create something that people would see on shelves and immediately think of a luxurious treat, but at an affordable price point. To me, our branding and packaging make a beautiful presentation that you want to share or gift while still remaining accessible for anyone who wants to indulge.”

As sales soared, Sharapova and her team leveraged the universal appeal of chocolate by introducing it to the line in May 2016.



“Given the success of our gummies during the first few years, we wanted to further expand our sweets offerings and chocolate was a natural next step,” she said. “I particularly enjoyed perfecting the mold for my chocolate bars, which are marked with a small lip shape on each square of chocolate. The execution of that lip shape took time to complete because they require a more complicated manufacturing process.”

Sharapova had long studied the branding practices of chocolate rivals: “The matte white packaging was intended to create a clean aesthetic amongst busy branding that you often see in the sweets section.”

## Best year yet?

Seven years in, there is no sign that the company’s momentum is ebbing. The past year has been particularly newsworthy for the brand.

Last August, Sugarpova announced that the brand was partnering with travel retailer Hudson Group and Los Angeles-based luxury hotel group SBE, putting the candies into hotels and airports in 22 countries.

“We’re constantly thinking about new ways to share Sugarpova with fans all over the world,” Sharapova said. “In addition to our partnership with Hudson News, we are excited to announce further global retail expansion this summer.”

That will add to what has already been an innovatively successful 2019.

Sharapova said this is “one of Sugarpova’s biggest years yet. We’re both expanding in terms of product to offer even more sweet options and growing to new retail markets as well.”

One of the highlights of the new offerings stems from her studying candy market trends, which include an emphasis on health and wellness.

“We recently unveiled a new line of gummies made entirely from all-natural ingredients at the Sweets & Snacks Expo in May, replacing these with natural ingredients like cane sugar, fruit, vegetable and other plant extracts like sunflower oil. I’m also excited to share these because they’ve been long in the making. We tested new formulations for 18 months to ensure we were using the highest-quality ingredients that also tasted amazing.”

Meanwhile, objective analyses envision the brand as a major force in the market for years to come. A May 10 report by HTF Market Intelligence forecasted that the dark chocolate market will

witness massive growth by 2023 and listed Sugarpova as one of the key players.

2019 could be a pivotal year for Sharapova on the court, too. Idle since January following shoulder surgery, she was scheduled to return for the Mallorca Open in mid-June. She gives no timetable for retirement but says when it happens, a Sugarpova 2.0 is a distinct possibility. 🍬

*Details: Sugarpova.com*

Porsche has been a longtime sponsor of Sharapova.



PHOTO BY GREG DIXON



PHOTO COURTESY OF SUGARPOVA

## MARIA SHARAPOVA

**Born:** Nyagan, Russia

**Age:** 32

**Marital status:** Single

**Turned pro:** Age 14

**First World Tennis Association win:**

2002 AIG Japan Open (age 15)

**Grand Slam titles:** 5

**Past endorsements:**

Nike, Avon, Evian, TAG Heuer, Porsche, Tiffany & Co.



## SWEETS & SNACKS EXPO SHOWCASES THE LATEST INVENTIVE TREATS

**IF YOU ASK JAMES HARDEN**, it was a slam-dunk that Trolli Sour Crunchy Crawlers won Best in Show at the recent Sweets & Snacks Expo in Chicago.

The 2017-18 National Basketball Association Most Valuable Player is not only a spokesperson for Trolli, he's represented in some of its product—namely, the Trolli Sour Brite Weird Beards in the shape of his face, with the beard in a different color.

Candy is bigger business than ever these days, with innovation and its stakes seemingly at an all-time high. Maria Sharapova, one of the expo's all-star guests, was a visible presence as she appeared in connection with her Sugarpova candy line (see main story).

The National Confectioners Association—hosts of the May event—cited data from Grand View Research

in mid-June that said worldwide snack bar sales are anticipated to reach \$31.6 billion by 2025 due to changing consumer lifestyles and food patterns.

It's a long way from the days of Necco wafers, Bit-O-Honey, Mallo Cups and other vintage treats, although the show featured some of those, too. Success in today's candy industry is largely dependent upon marketing, presentation and keeping up with the Hersheys via the latest trends.

### Getting healthier

If you're wondering about the connection between candy and inventing, don't. Innovation is a dominant theme at the show that this year featured more than 800 exhibitors and 350 new candy/snack products, presenting to more than 15,000 candy and snack professionals.

Just as inventor Harry Burnett Reese conceived the top-selling Reese's Peanut Butter Cup in 1928 to help provide for his 16 children, somebody or some company invented the Sour Patch Kids Twins Tube Freezer Bar.

The Trolli line and its offbeat marketing campaign is the hallmark of innovation. (Ironically, Trolli Sour Crunchy Crawlers were not available for tasting at the Chicago show. They have been described as a gummy worm with a thin, crunchy texture. Trolli Sour Candy Corn won a Most Innovative New Product Award for seasonal.)

Some of the new blockbusters came from venerable industry mainstays. Triscuit Wheatberry Clusters, which won a Most Innovative New

## BITS AND PIECES

- Each year, confectionery items account for \$35 billion in retail sales. Snack items account for \$51 billion in retail sales.
- The confectionery industry directly employs nearly 54,000 Americans in manufacturing jobs, and supports more than 550,000 jobs in other industries.
- A 2011 study sponsored by the National Confectioners Association determined that people who eat candy weigh less than people who don't.
- The "Duds" in the name of the candy Milk Duds is because the original goal was to have perfectly round pieces of candy and the machines the company had couldn't do it.





Product Award in the Savory Snacks category, marked the first time in the company's century-plus existence that it launched a non-cracker snack. Wheatberry Clusters feature wheat berries in their original whole wheat kernel form, roasted and clustered together with natural ingredients such as nuts, seeds and dried fruit.

Triscuit's non-cracker debut is a shining example of a dominant industry trend: real fruit and real vegetable snacks—freeze-dried or dehydrated fruit, fruit clusters and fruit nut clusters—as consumers try to get more fruit and vegetables into their diet.

### Premium-what?

Jared Koerten, an analyst on packaged foods for Euromonitor, talked about the three main premiumization components during an interview at the show. Premiumization is an oversyllable-ized way to describe an industry focus on superior quality and exclusivity.

One of those components, ingredients, follows the healthful trend via ethnically sourced, locally sourced and organically sourced ingredients. It's part of the move away from GMOs (genetically modified organisms) or pesticides. Koerten said curation is also key: "How those ingredients are pulled together is really important. Diverse flavors, unique textures are really important."

The push for wellness has led to products with probiotics, fiber, collagen, omegas and even aloe vera "as people turn to snacks as more than just an indulgence but looking for an additional health benefit."

Packaging continues to be crucial. Whether it's made of foil, standup pouches, boxes or tins, a product's appearance on the shelf is as important as ever in the face of growing competition. Main sub-elements are functional packaging such as "grab-and-go," smaller pack options, and seasonality within packaging.

The third component, channels, can involve specialty stores, boutiques, even travel retail.

### Enter ruby chocolate

Koerten said that darker chocolate, known for its health benefits, continues its momentum. The darker variety is known to lower blood pressure, simulate endorphin production, ease stress and depression, fight cancer and slow aging, among other pluses.

But ruby chocolate is the real new sweet spot in the category. Ruby cocoa officially arrived in the U.S.

market in mid-May; chocolatier Barry Callebaut marked the occasion a week later with a ruby chocolate reception at the show.

The chocolate, which has a slight berry flavor and is ideal for Valentine's Day, is billed by Callebaut as the greatest innovation in chocolate since Nestle introduced white chocolate 80 years ago. However, the *Chicago Tribune* reported that Callebaut has been waiting for more than a year to get permission from the Food and Drug Administration to market ruby as "chocolate," with the hope of creating a fourth type of chocolate after dark, milk and white.

Once his company gets a temporary marketing permit and can sell the product as chocolate, it can begin gauging interest from manufacturers and consumers in creating a new category of chocolate. ☑

—Reid Creager



## THE ENVELOPE, PLEASE

The 2019 Most Innovative New Product Awards winners, selected from more than 300 products:

**Chocolate:** Kit Kat Duos Mint + Dark Chocolate, The Hershey Co.

**Non-Chocolate:** PEEPS Flavored Jelly Beans, Just Born Confections Inc.

**Sweet Snacks:** Whole Raspberries Freshly Frozen & Immersed in Premium White and Milk Chocolate, Tru Fru LLC

**Salty Snacks:** Cheez-It Snap'd, Kellogg Co.

**Savory Snacks:** Triscuit Wheatberry Clusters – Pumpkin Seeds & Sweet Corn, Mondelēz International Inc.

**Novelty/Licensed:** Sour Patch Kids Twin Tube Freezer Bars, Jel Sert Co.

**Seasonal:** Trolli Candy Corn, Ferrara Candy Co. Inc.

**Gourmet:** Whole Raspberries Freshly Frozen & Immersed in Premium White and Dark Chocolate, Tru Fru LLC

**Gum & Mints:** Tic Tac X-Freeze, Ferrero USA Inc.





# 10 Criteria for a Winning Product

THESE FACTORS CAN HELP YOU CHOOSE  
YOUR MOST VIABLE IDEA **BY DON DEBELAK**

**I**NVENTORS typically have more than one product idea, so they often need to decide which one to pursue the hardest. They want to be sure to focus on an idea that has the potential to be a big winner.

These 10 criteria can help you decide which product could be your ticket to major success. You don't need to satisfy all 10, but the more you meet the better chance you will have.

**1. The product has the “wow” factor.** When you have a product that does great things or meets important needs, it will resonate with people.

When you first thought of the idea, did your eyes open wide? Did you say, “Yes, this is it; I've got a great idea”?

**2. People agree with your premise.** A premise is the reason you feel your product will sell.

If your product is earmuffs with built-in headphones, your premise is that people want to hear music when they wear earmuffs. Do people agree with your premise? Ask at least 10 people and have at least half of them agree to believe you have a great idea.

**3. The product offers a total solution.** Cutting the number of products required for an activity from three to two isn't all that impressive in the market, but you hit paydirt when you cut the products needed to just one.

**4. The product targets people with passion.** Everyone is passionate about something, and the people you are targeting should be passionate about your type of product.

When people care about a product category, they evaluate it closely, read trade magazines, go to trade shows, visit websites and talk to like-minded enthusiasts. That interest makes it easier for inventors to inexpensively reach their prospects. New mothers can be very passionate about baby products. That's the passion you need.

**5. The product relates to an emerging market.** When the scrapbook industry started, dozens of inventors and new product entrepreneurs were able to introduce their product because there was a shortage of products to buy. That is not the case anymore, but the fact remains that inventors have a great chance any time a market is emerging.

**6. The product targets new trends in an existing market.** This is similar to the previous factor, but it is in an established product.

When golfers switched from pull carts to push carts, there were many opportunities for inventors—both for the carts themselves and for accessories such as cup holders, umbrella holders and baskets to hold supplies. I highly recommend

**If your product is earmuffs with built-in headphones, your premise is that people want to hear music when they wear earmuffs. Do people agree with your premise?**

that inventors choose one or two areas where they have a high degree of interest and to track emerging product categories and new trends. By tracking their passion, inventors will often find a winning product.

**7. The product offers few technical challenges.** Inventors can and do introduce technically difficult products. But this type of invention requires more money, more time and more expertise than most inventors have. Simpler products, like Rollerblades, are far easier to introduce for the average inventor.

**8. Targeted customers can easily find the products.** Products are easy to find when prospects can find them at specialty stores and catalogs.

This is why inventors do well with kitchen products. There are many small stores that are relatively easy to sell to and stores that prospective customers probably visit every three months or so.

Eventually, most inventors want to be selling at mass merchants, but typically they don't have the money or product success to land at a mass merchant right away. So the key is to have a specialty chain of stores, or some popular websites or catalogs to sell an unproven product.

**9. The product conveys its major benefits quickly.** Complex packaging, promotion and advertising are all expensive, but they are required when a product is difficult to understand.

People should be able to understand your product immediately—within two seconds and without any explanation from you if you are going to succeed. Besides consumers, both retail stores and distributors are turned off by a product they don't understand.

**10. The product avoids competitors with category-dominating companies.** Don't try to compete with Rubbermaid, which dominates the market. These companies have broad product lines and get premium shelf space. They are not above complaining about any space given to a pipsqueak inventor who's trying to get started.

If the dominating company likes your idea, it will try to figure out a way to get around your patents and will have lots of resources to come after you. ☛

**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.



## 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*

## 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

**VenturSource**

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

# Answers to Your Challenges

READERS POST A VARIETY OF PROTOTYPING QUESTIONS

BY JEREMY LOSAW

**ONE OF THE THINGS** that sets apart Enventys Partners from other product development agencies is the ability to prototype nearly anything. Whether it's an IoT device, molded part or soft good, we have the talent and experience to build beautiful and functional prototypes. I am fortunate to work with and learn from my great team.

I often receive questions about prototyping challenges from readers. Here are some answers to your prototyping challenges.

**Dave Vaccaro: If a prototype can demonstrate the function/use of the idea, is it important that it looks exactly the way it is presented as an idea?**

The answer to this depends on your goals for the prototype and who is going to see and use it.

If you are early in the development process and still evaluating and refining the core technology, it is often a better strategy to build many non-aesthetic prototypes for function testing. This allows you to test more iterations at a lower time and dollar cost.

Non-aesthetic models are fine for presenting to potential licensees, as they will likely receive a complete face-lift to fit with the brand that licenses it. I have seen prototypes of licensed technology that were made from bits of PVC pipe and golf balls.

However, if you are looking for real consumer feedback from a non-controlled audience—such as a trade show, webpage or crowdfunding campaign—it is best to have a fully fleshed-out, looks-like/works-like prototype. This requires a bigger time and financial commitment but is necessary to drum up enthusiasm and pre-sales for the product.

**Jeff Pohlman: Can I take my prototype item (i.e., hand-built of clay, plaster-of-Paris techniques, and fiberglass), the size of a car, submit it to a roto-scan that will convert it to a SolidWorks database, then produce it—say out of laser-cut titanium, wood, or 3D printer ink? (I saw car-sized 3D-print-stuff at last year's SEMA show!!!)**

Large-scale prototypes pose many challenges. Most of the devices that we build in the Enventys Partners shop are for personal consumer use and usually smaller than a basketball.

These products have parts that are small enough to 3D-print or machine with standard equipment. However, we do plenty of large-scale prototypes, too. The techniques we use vary, depending on the requirements of the project.

One of our favorite techniques for large plastic parts is to split them into manageable sizes for standard size mills. The CAD file is puzzled to make a series of smaller parts; they are then machined from blocks of plastic. The finished parts are assembled and bonded back together to form the desired shape. The parts have great strength and are easy to sand and paint to give them a great finish.

Another option is to use large-format 3D printing. Service bureaus such as Arrival3D have monster machines to build large parts for the aerospace and automotive industries, and can handle car-sized parts. Expect that large 3D prints come with a proportionately large price tag.

This prototype of the Smarterra connected terrarium was meticulously constructed for launch on Kickstarter.







If you are trying to make parts that are not particularly beautiful, you can DIY them by using carving foam insulation in tandem with CAD files to provide cut templates.

If you are trying to make parts that are not particularly beautiful, you can DIY them by carving foam insulation. Pieces of foam can be bonded together to form large blocks. CAD files can be printed on large-format 2D plotters to provide cut templates that can be taped over the foam block as a guide to make accurate cuts.

**Kenneth Rainbolt:** Have you ever made a round pocket in sheet metal using a homemade punch press or die? It's about 2.5 inches in diameter by ¼ inch deep, in 20-gauge steel plate. I used a vice, two different-size sockets and a sledgehammer—messed up my wrist tendons bad but better now. I bought one of those 1-ton arbor presses and it's not powerful enough.

What you are trying to do is prototype a die-stamping operation, which is varsity level prototyping.

The first time I ever saw stamping being used for production parts was on a “Sesame Street” episode that showed how saxophones are made. It is a very pleasing 2-minute video that is well preserved on YouTube, showing the tubes being cut and stamped from raw sheet material.

Production stamping machines are typically rated for many tons and driven by high-powered electric motors. Fortunately, there is a fairly straightforward calculation to figure out how much force you need

to form sheet metal. It takes into account the diameter of the form, the thickness and the strength of the material. There are tables available for quick look-up.

For your shape you need about 7 tons of force, so I am not surprised you hurt yourself trying to form it by hand with such a small press. Your best bet would be to reach out to a metal former in your area, or to one of the national prototype parts houses such as Rapid Manufacturing ([rapidmanufacturing.com/](http://rapidmanufacturing.com/) [rapid-sheet-metal/](http://rapid-sheet-metal/)) for a quote.

**Derrick James:** What prototyping resources does Enventys Partners have?

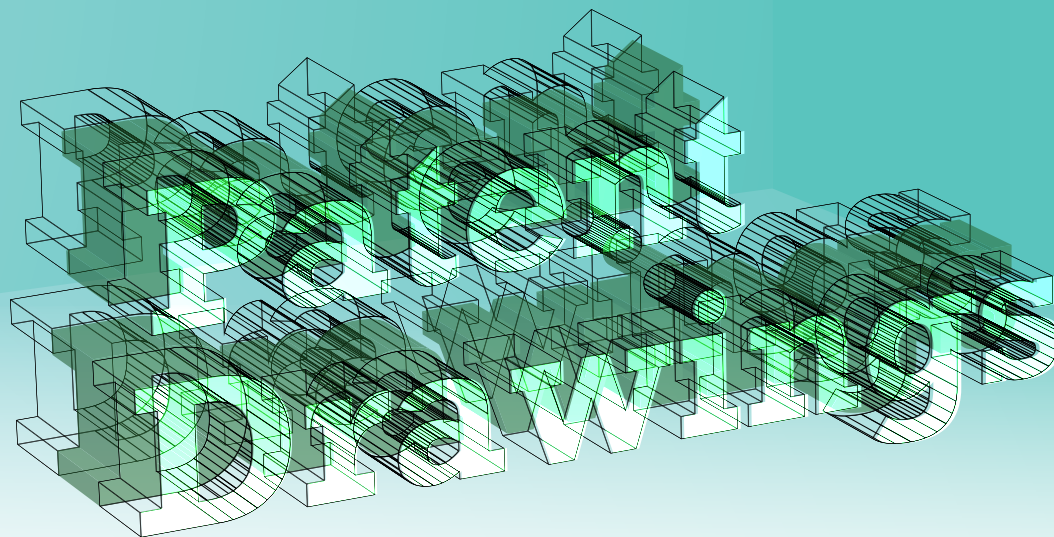
We like to say that we have enough tools and equipment to build one of anything that comes across our desks.

We have a suite of desktop and industrial 3D printers, a waterjet cutter, laser cutter, CNC machines, tube benders and a vacuum former. There is molding equipment to do urethane and silicone parts and a whole suite of hand tools such as saws, drill presses and benders—not to mention a paint booth to facilitate finishing work.

All of that is on the physical product side, but we also have a wealth of electronics development tools that are housed in a newly renovated space in the building. It is a cornucopia of capabilities and the envy of garage inventors. 📍

**Top:** Divergent 3D created a buzz with its stunning concept car, the Blade, at the 2017 Consumer Electronics Show.

**Inset:** The arbor press in the Enventys Partners shop is used often for making small metal parts.



# Patent Drawings, Invention Illustrations

INSIDE THE PROCESSES AND WHAT WORKS BEST FOR DIFFERENT SITUATIONS **BY GENE QUINN**

**I**F YOU are going to file a patent application, you must have drawings to include in the application. But patent drawings are not the only type of drawings that an inventor should consider.

Patent drawings are wonderful for a patent application, but they don't always do the invention justice if you are trying to capture the attention of a prospective licensee or if you are trying to convince a buyer to place orders or sell the invention in their store.

Simply stated, patent drawings and other types of invention drawings—such as 3D renderings and photo-realistic virtual prototypes—serve different purposes.

## Don't forget the licensee

The patent drawing contains reference numerals that are used by the patent attorney in the “detailed description” of the patent application, and this is a perfectly fine illustration to include in a patent application. But remember, the point of the detailed description is to describe what is shown in the figures (at a minimum).

This is done in writing, as if the reader is standing next to you as you describe what the figure shows. Use the reference numerals to draw the attention of the reader to the part of the figure you are discussing at any given time.

That, however, is noise when you are trying to capture the attention of a prospective licensee. What

you need is something that allows the person you are pitching to quickly and easily envision the product as it will be sold. As necessary as patent drawings are, they do not capture the consumer product with nearly the same impact as 3D rendering does.

With patent drawings, you can show exploded views (imagine sketched directions with corresponding letters and numbers, as you would often find with a new product you have to assemble) that allow you to show how the pieces and parts fit together. This enables the patent attorney to describe how to make the invention step by step—not only a good idea, but a requirement for any patent application.

Of course, such exploded views invariably focus on the internal, not the external. Will a prospective licensee really be concerned, at least in the first instance, about the internal workings?

A prospective licensee will no doubt want to know about the internal workings and how everything is put together, but that comes only after you have captured his or her attention and have them ready, willing and interested to learn more.

So in the first instance, a 3D rendering or photo-realistic virtual prototype is far more likely to capture the attention of prospective licensees. You want to grab them with a compelling visual presentation of a real and tangible product. Once they are interested, you can go deeper.

### Go pro when possible

A patent applicant is required to furnish at least one patent drawing (sometimes referred to as a patent illustration) of the invention whenever the invention is capable of illustration by way of a drawing. Said another way, whenever a drawing would assist in the understanding of an invention, you need at least one patent drawing. Based on my experience, I can say that a patent drawing is almost always required, and even if it is not technically required you should have at least one patent drawing.

Why take the chance that the patent examiner will require patent drawings? If you need a patent drawing and one is not provided in the original filing of a non-provisional patent application you are not even awarded a filing date, which can be catastrophic.

I urge inventors to understand the patent drawing requirement in this way: The only time patent drawings are not required is when the invention relates to a chemical compound, composition or a method.

It is always better to be safe than sorry with drawings. That is why I always advocate for filing patent applications with more drawings. Drawings are not free, but they do not cost very much given the overall cost of filing for and obtaining a patent.

For more on working with patent drawings, see “Patent Drawings 101: The Way to Better Patent Applications” at [ipwatchdog.com](http://ipwatchdog.com).

Detailed drawings are indeed worth a thousand words, if not more. This is true because if you accidentally leave something out of the written disclosure, a drawing you submit may save you in the long run—provided, of course, it is detailed enough to convey nuanced information about your invention.

Because the detail of the patent drawing is what saves you, having a professional patent illustrator is wise. Without question, the best way to broaden the scope of any application is to file the application with multiple, detailed and professional drawings. The benefit received from professional patent illustration is well worth the investment.

### 3D CAD renderings

So you should rush off to a patent illustrator and get your invention illustrated with numerous drawings showing a variety of views from different vantage points, right? Not so fast!

What if you could get initial illustrations that can be used for multiple different purposes? That would make the most sense because it is more economical—and you can if you work with someone who does 3D rendering.

From 3D CAD renderings, a photo-realistic virtual prototype is created, which can then be branded and added to the sell sheet. By following this process, the 3D CAD renderings can be outputted as line drawings that make exceptionally good patent drawings, at least for a provisional patent application where the focus is disclosure.

The United States Patent and Trademark Office will never examine a provisional patent application, so none of the picky patent drawing rules will be enforced against provisional patent drawings. Therefore, you just need to have quality line drawings for a provisional patent application. Once the 3D CAD renderings are done, you can output as many drawings as you want—from various rotated viewpoints to a variety of close-up views.

## Patent drawings and other types of invention drawings—such as 3D renderings and photo-realistic virtual prototypes—serve different purposes.

True, patent drawings must show every feature of the invention specified in the claims, and for a non-provisional patent application they are required to be in a particular form. The patent office specifies the size of the drawing sheet on which the illustration is made, the type of paper, the margins, and many other hyper-technical details relating to the making of the drawings—including shading and size of text if present.

The reason for specifying the standards in detail is that the drawings are printed and published in a uniform style when the patent issues, and the drawings must also be such that they can be readily understood by people using the patent descriptions.

But none of these rules apply to provisional patent drawings, and the focus of a provisional patent application is to demonstrate the entirety of the invention. What better way to do that than with numerous drawings that have been outputted after a 3D CAD rendering? Thus, the 3D CAD rendering becomes the focal point for allowing inventors to obtain all of the types of illustrations they will need initially. 📌

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







# The Curse of the Lonely Patent

VALUE OF SINGLE-PATENT PORTFOLIOS  
CONTINUES TO PLUMMET **BY LOUIS CARBONNEAU**

**W** **E AT TANGIBLE IP** are routinely contacted by inventors who developed some novel contraption or concept for which they received a patent.

However, because they focused on one single invention, unsurprisingly, they generally end up with one single patent. It doesn't occur to them that more may be better, or they simply cannot afford the additional expense.

This situation is compounded by the fact that these patents are rarely written with enforceability in mind. They focus on describing the invention, when instead they should preempt designing around it.

Naturally, they end up with what I call the "curse" of the lonely patent. As good as the invention may be, there is no market for transacting single patents. We hear this all the time from buyers when looking to possibly acquire portfolios: "We are not interested in single-patent portfolios."

Recent statistics confirm this trend and show that the value of single patents fell a whopping 56 percent from 2017 to 2018, according to the latest Real Pricing Data study we participated in and covered in more detail a few months ago.

## Inventors, fight back

The main reason behind this decline is relatively simple: Barring a few exceptions, all patents that eventually find a buyer are those that are infringed by at least one third party.

I have alluded to this frequently in the past. Patents are a negative right (i.e., the right to exclude others). They only gain in value in the hand of an owner who does not practice the invention itself when someone else does.

This means the owner has to enforce the patent to extract revenues. This, in turn, is either done via licensing negotiations or more often through litigation—as most infringers simply refuse to pay voluntarily for the right to practice the patent, especially if they just happen to read of those patents without any previous history with the patent owner.

In other words, you will likely have to fight to get a return on your investment, and very few people want to go to war with a single bullet in their arsenal.

This market reality conflicts directly with the natural tendency for most individual inventors to limit themselves to one patent because of the heavy costs involved, and the fact that it does not come naturally to ask for a second patent when you just received one.

Alas, this a fatal mistake in most cases. At the very least, inventors should keep the patent family alive by filing at least one continuation in the United States (and another one once the first one is allowed, and so forth). This leaves open the ability to amend the claims to better match new case law or new infringement scenarios that were not anticipated when the original patent was filed.

Equally important these days is the need to extend the geographic scope of protection internationally. Currently, several buyers will simply not look at portfolios unless there is at least one German or Chinese patent in the family. Luckily, it is still possible to obtain an injunction in those countries, whereas it is virtually impossible to get one in the United States.

And one should not minimize the leverage these may provide to the patent owner; many global settlements take place simply because an infringer is being sued in one of these countries.

## Q2 updates

The latest numbers on the brokered market reflect an ever-increasing inventory, but not a proportionate increase in sales.

According to ROL Insights, which tracks transactions, the first quarter of 2019 showed strong growth in the number of assets brought to the market compared to Q1 of last year, with almost 7,300 new assets offered for sale. However, very few of those actually sell (i.e. no assignment), which confirms that the market—while trending positively—has yet to eliminate its excess inventory and that the sale cycle is still relatively long.

Our own response to this phenomenon, even for a few of the single patents we have taken on brokerage



(arguably in a moment of weakness!), has been to successfully negotiate several individual licenses with interested parties who may not desire to acquire the assets but understand the value of securing defensive rights before a third party buys these very patents and assert against them.

On a positive note—and this should not be discounted—we are starting to see for the first time in years Non Practicing Entities (NPEs) put some real cash upfront to acquire portfolios, reflecting a desire to retain most (if not all) of the potential upside for themselves. This means that those taking the risks are now feeling more confident about the outcome and do not want to share.

A little greed in this context is actually a good thing for inventors who are looking for an immediate influx of cash and have little appetite for playing the long game. It will be interesting to see if the courts prove these aggressive buyers right.

### Buyers and sellers

Staying on the NPE topic, a couple of studies recently attempted to shed light on these entities—entities that are maligned by a very vocal group of large companies (aka the “patent troll” lobby) as being more or less the parasites of the patent system, while being hailed simultaneously by the inventor community as their only viable path to patent monetization.

Stanford University released to the public a massive database that monitored 10 years of NPE litigation. Its main conclusion is that a very diversified group of companies have been historically pigeon-holed under the “troll” label, whereas the reality shows the presence of up to 13 different subcategories. This calls for a more nuanced narrative than the traditional name calling.

One other study by David Abrams and Gokhan Oz first points to the fact that NPEs are nothing new. William E. Simonds even wrote a book in 1871 titled “Practical Suggestions on the Sale of Patents” that illustrated the importance of interacting with these “patent brokers.” It goes on to postulate that NPEs can either be “benign middlemen” by encouraging upstream innovation (as inventors see a monetization path for their patents) or “stick-up artists” by discouraging downstream innovation (if other companies fear a future “patent tax” on their own activities).

Nothing revolutionary there, but the authors coherently explain why the two sides are so passionate about their own narrative. Their conclusion, though, is quite interesting and worth quoting:

“We find that the overall effect of NPEs on innovation depends crucially on the degree of infringement coming from non-innovating producers (e.g. those producing “me-too” products). If non-innovating producers represent a majority of patent



infringement, the net effect of NPEs on innovation is benign. If the majority of infringement comes from innovators, NPEs are discouraging downstream innovation more than they encourage upstream innovation and have a net negative effect.”

In other words, if one believes the current issue of “efficient infringement” by large aggregators outweighs the risk that innovative start-ups may stop innovating by fear of being used by NPEs, one should support their role as the “benign middlemen” of the patent market, and vice versa.

Personally, I think the former clearly makes more sense. Given the current cost of litigation and the fact that NPEs cannot obtain an injunctive relief, it makes no sense for an NPE to sue a company unless its infringing activities attach to a very large amount of sales, which is the realm of the very big companies.

Plus, it seems a lot easier to curb potential excess by protecting small companies downstream rather than having a large swath of the population stop innovating in the first place because it has lost faith that the patent system can adequately reward their contributions.

## Winners and losers

The big recent news was the momentous settlement after their first day in court between **Apple** and **Qualcomm**, which will see Apple write a check for \$4.5 billion to its San Diego nemesis in order to settle owed royalties and other damages.



## I’LL SEE YOU IN COURT

Since I believe it is paramount to maintain the integrity of the system on both the sides of the enforcement coin, I’m the first to condemn the unethical use of patents. So it is interesting to note when a rare case is reported alleging patent abuse by an operating company.

Slot machine maker **Everi Holdings** has been hit with an antitrust lawsuit, accusing it of using sham patent filings and baseless litigation to monopolize the market for casino ATMs. The case is still pending, but we shall see where the chips fall. ...

Stealing a page from this same playbook, telematics supplier **Continental Automotive** recently filed a Northern District of California suit accusing patent pool **Avanci** and other standard essential patents (SEP) holders of colluding to drive up the price of wireless connectivity for autos. This is a case everyone will be monitoring closely, as it strikes at the very heart of patent pooling and obligations to license SEP under what is called “Fair, Reasonable and Non Discriminatory” (FRAND) terms.

The Chinese government has picked up on this, too; it was recently announced that large 5G patent owner **Ericsson** was under antitrust investigation in Beijing over its licensing practices.

Although most have declared Qualcomm the clear winner of this patent war, it was not lost that during the fight where Apple essentially refused to pay Qualcomm money it has agreed to already through a licensing agreement, the chip company had to lay off over 1,500 employees—many of whom were later hired by Apple.

It was also reported that Apple internally praised Qualcomm’s chip technology while denigrating it publicly, and that it even entered into other licensing deals with suppliers of inferior technology in order to bolster the argument that Qualcomm was asking too much for its chipsets. ...

On the other side of the spectrum, there was a bitter ending for pharma **Allergan’s** ill-faith strategy to use a U.S. native Indian tribe in order to bypass the Patent Trial and Appeal Board’s inter partes review process (based on the tribe’s alleged sovereignty). After being denied by the PTAB itself and the lower courts, the company appealed to the U.S. Supreme Court. SCOTUS refused to hear the case, dealing it a last blow.

It will be interesting to see if U.S. universities (which make the same argument but on slightly different constitutional grounds) will see a different outcome. By then, the IPR process may no longer be known as the “patent death squad,” as invalidation rates continue to slowly drop under new PTAB rules. ...

We keep talking about China eroding the U.S. historical patent dominance these days. According to a recent report, the numbers support strategic technology areas such as artificial intelligence, the Internet of Things (IoT) and financial technology.

A study conducted by Kilpatrick Townsend & Stockton and Grey B revealed the loss of influence from American-based inventions in those areas in the past decade, most of it offset by Chinese-based filings.

- U.S. applicants filed 66 percent of patents for artificial intelligence in 2018, down from 78 percent in 2007.
- U.S. applicants filed a little less than 75 percent of patents in financial tech in 2018, down from 82 percent in 2007.
- U.S. applicants filed 59 percent of patents for IoT patents in 2018, down from 66 percent in 2007. 📌

**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.







# ALL Winners

**More than 500 award-winning K-12 inventors from** across the world gathered at the Henry Ford Museum of American Innovation in Dearborn, Michigan, on May 30-31 to compete for top awards at The Henry Ford's Invention Convention U.S. Nationals.

The event, presented by United Technologies Corp., provides a live, in-person opportunity for youth inventors and entrepreneurs to display their critical thinking skills through inventing, innovating and entrepreneurial activities.

Each year, student "winners" from affiliate member youth invention and entrepreneurship competitions across the United States are invited to attend the U.S. Nationals event. The event acts as a U.S. national "finals" competition of local, regional, state and sectional invention competitions across the country.



©ALICIA LOOS

Seventh-grader Vikram Anantha, winner of the Most Innovative Award for his Automated Communication Companion for autistic children, poses with Jason Chua (left), executive director of advanced projects at event sponsor United Technologies, and Patricia Mooradian, president and CEO at The Henry Ford.

TOP AND BOTTOM PHOTOS BY KMS PHOTOGRAPHY



Sixth-grader Lino Marrero won the Industry Innovation Award for his invention Kinetic Kickz, an energy-harvesting technology that you can insert in your shoe to collect your wasted energy from walking.



Ninth-grader Arthur Zhang presents his Best Engineering Award-winning invention AWARE to judges. AWARE is an interconnected network of sensors that uses artificial intelligence to make predictions for natural disasters.



# One Crucial Word

RESTORING THE U.S. PATENT SYSTEM  
COMES DOWN TO COOPERATION **BY GENE QUINN**

*Editor's note: The following is adapted from Gene Quinn's speech delivered at the Eagle Forum Education & Legal Defense Fund's May 22 event, "The Road Back: Restoring American Patents."*

**B**ASED ON the age of many of us in the room, President Reagan was probably the first president many of us remember. And I mention this because we need another President Reagan—another person like that, who sees the power of the patent system.

Upon taking office, President Reagan told the then-leaders at the patent office that the backlog of unexamined patent applications was unacceptable and he wanted it brought down to 18 months in his first term. The leaders at the patent office told him that that was simply not possible. That's how bad the backlog was then.

And then President Reagan and his advisers asked whether it would be possible to reduce the backlog to an average pendency of 18 months within two terms, assuming he would be given two terms. And they said, "Yes, we think we can do that within two terms."

And they didn't quite get it done, but they got really, really close. They got to around 18.2 or 18.3 months average pendency by the end of President Reagan's second term. And it was because President Reagan invested in the patent office.

President Reagan gave the patent office the resources they needed. And it shouldn't be a surprise as to why. If we put ourselves back at that moment in time, everybody believed that we were going to be buying Japanese everything.

Now, I can't understand why others don't see this threat, and I think many in the room do understand the threat is real, but soon we are going to be buying Chinese everything—and it's not because they're stealing our intellectual property. This is the thing that the popular media gets completely wrong.

I'm not going to say that there aren't companies that aren't stealing intellectual property because that would be naïve, but U.S. companies are willingly giving away intellectual property to get market access in China. We are eating our own seed corn; it is that simple. So, that's a problem.

## The bad news

Today, I'm supposed to be speaking about the path forward. I've given this a lot of thought and I have only one word that I'm going to leave you with about the future and road forward. But before I give you that one word and why it is so critical, what I'd like to do is talk very briefly about some of the bad news we've received just recently.

Just last week, the Federal Trade Commission prevailed even though the documents in the *Apple v. Qualcomm* case suggested that it was Apple that was manipulating the market and not Qualcomm. The FTC continued to push the case with the thinnest of evidence—maybe even no evidence—and prevailed.

I just don't understand how the FTC can have one view of the patent system and the Department of Justice and the patent office can have a different view of the patent system. It seems that the Trump Administration needs to sort things out and get on the same page.

Meanwhile, the pharmaceutical companies are under investigation for drug prices and there is this belief that high drug prices are related to patents, as if the FDA process to gain approval is both free and doesn't take any time, and also that the research is free and doesn't take any time or investment.

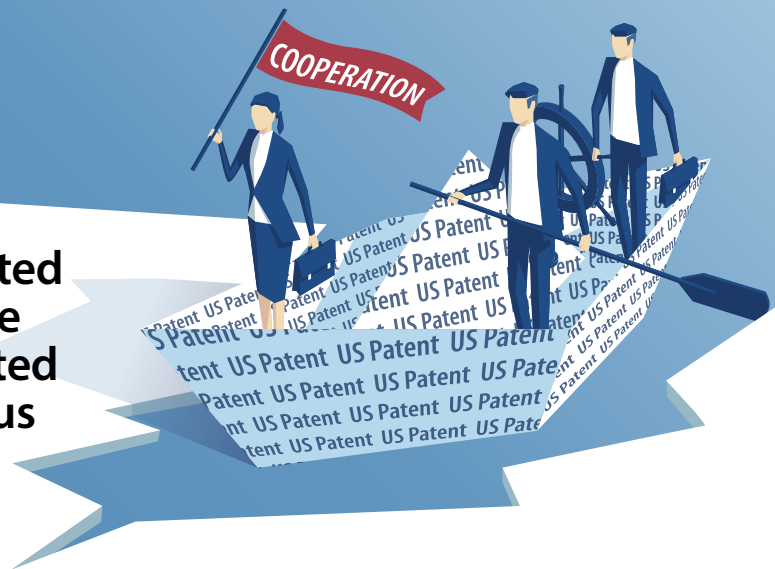
While no one likes to pay high drug prices, blaming patents and focusing only on the price of the single blockbuster drug misses the point that as many as 90 percent of all drugs fail, so that means the 10 percent that don't fail need to not only pay for themselves but also for the other 90 percent that fail.

Universities face near constant threat by those who want to get Bayh-Dole overturned and repealed. Now, stop and think about that for one second.

Bayh-Dole is characterized as the most successful piece of domestic legislation since World War II. And there are people out there that want it to be erased, as if it were a mistake, as if it never existed. But the facts are the facts, and Bayh-Dole put an end to a truly byzantine process to license government-funded technology that led to virtually no government funded technology ever being licensed, and is directly responsible for creating 10,000-plus startup companies and hundreds of thousands of jobs.



**The other side that has wanted to have patents eroded have been enormously coordinated in their efforts. ... Those of us who are on the pro-patent side have been fractured.**



And we all know the carnage at the Patent Trial and Appeal Board (PTAB) and the 101 jurisprudence that the Supreme Court has left us with.

### **Fixing the problems**

We have good news, though! Senators Tillis and Coons and Congressmen Collins, Johnson and Stivers have released draft legislative language that would, if it ever gets enacted, largely fix the 101 problem (patent eligibility). ...

So, this leaves me with the one word that I think is the future for those who support a strong patent system: “Cooperation.”

Now, we all need to look around and notice that the other side that has wanted to have patents eroded have been enormously coordinated in their efforts. And we have not been. Those of us who are on the pro-patent side have been fractured.

I just read a list dealing with standard essential patents, drug patents, universities, and high-tech troubles. And every one of those groups is fighting as if they are the only ones having a problem and the only ones fighting. And nobody is helping anyone else fight their battles.

It is easy to say: “Well, it’s not my battle to fight; I will fight my battle.” But I’ve been saying and writing for years that if you don’t get involved and help those with whom you have a natural alliance, eventually the people who are coming after you and your patent are going to get what they want. And what they want isn’t just you not to have your patents in your sector; they want nobody to have patents on anything, period.

That is their aim. Make no mistake about it. And at times they even honestly tell you that, when they fund the elimination of stupid patents, for example.

Over the past several years I’ve become acquainted with Mark Cuban a little bit, and as some of you

know I’ve had the opportunity to interview him. He is not the flamethrower that you might think. His concern is companies getting sued at too early a stage, and that is a threat for all start-ups: getting sued before you can get traction. He has a point.

Mark Cuban strikes me as far more pro-small business than he is anti-patent, although sometimes his rhetoric may seem otherwise. If you look past the rhetoric, he is concerned with businesses succeeding. And at the core that seems to be the concern of everyone in this room.

### **The challenge ahead**

We have done a poor job—even worse than a poor job. The bad actors in our community have defined us, and that is because we haven’t cooperated among ourselves. We haven’t provided a united front. When the pharmaceutical people are under attack, the high-tech people go and hide, and vice versa. And as long as that happens, then we have no chance of winning.

Those of you who are students of history will recall that the way that Alexander the Great won his battles was always by fighting with smaller armies than he prevailed against. The way he was able to fight was to take on one piece of the larger army at a time never confronting the full army at any one time.

And I am convinced, and I know that you know, that the larger army is on our side. We have more money, we have more people, we have more stories, and the good and the right is on the side of a strong and vibrant patent system.

What we need to do is cooperate and get the message out there. So, I challenge you today to cooperate with one another and see a challenge to one person’s patents as a challenge to everybody’s patents. And by that, we will be honoring the past inventors and giving the future inventors a way to move forward. Thank you. 📌



## JULY 2019 TRADE SHOWS

July 9-11

**Intersolar North America Exhibition**  
Moscone Center, San Francisco  
No U.S. phone number; intersolar.us

July 17-20

**AWFS Fair (Association of Woodworking  
& Furnishings Suppliers)**  
Las Vegas Convention Center  
800-946-2937; awfsfair.orgb

## 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](http://www.inventor-mentor.com)

*Best wishes, Jack Lander*

[www.DESIGNSTEINSTUDIOS.com](http://www.DESIGNSTEINSTUDIOS.com)

A one stop product design firm working with inventors, start-ups and Fortune 500 companies on developing the next generation of products and inventions to hit store shelves. We assist in navigating the complex path of product development with an emphasis on getting to licensing or production.



## ACT-ON-TECHNOLOGY LAW OFFICE

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

Call (413) 386-3181. [www.ipatentinventions.com](http://www.ipatentinventions.com).  
Email [stan01020@yahoo.com](mailto:stan01020@yahoo.com). Advertisement. Stan Collier, Esq.

## CHINA MANUFACTURING

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

Call (845) 321-2362. [EGT@egtglobaltrading.com](mailto:EGT@egtglobaltrading.com)  
or [www.egtglobaltrading.com](http://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 FOR LICENSE

Relief while seated utilizing gentle traction (vertebrate spacing, alignment system). The inventor has multiple patents for this product and a working prototype is available. This market has 100's of millions of potential customers worldwide. Please contact us for more information and a product demo video at 717-624-2207 or email: [thebackjackinfo@gmail.com](mailto:thebackjackinfo@gmail.com)

## INVENTION TO LICENSE

Fantastic pet system that has no rivals.  
See us at [PETS-LLC.com](http://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](mailto:alan@pets-llc.com)

## PATENT SERVICES

Affordable patent services for independent inventors and small business. Provisional applications from \$600. Utility applications from \$1,800. Free consultations and quotations. Ted Masters & Associates, Inc.

5121 Spicewood Dr. • Charlotte, NC 28227  
(704) 545-0037 or [www.patentapplications.net](http://www.patentapplications.net)

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

# 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](http://inventorsdigest.com), as well as other possible perks.

## PLATINUM SPONSORS

ENVENTYS  
PARTNERS

SAVE THE  
AMERICAN  
INVENTOR

## GOLD SPONSOR



**Subscribers:** Pledge \$50, \$100, \$250, \$500, or \$1,000 a year to help support the world's longest-running magazine devoted specifically to inventors and inventing. We'll include a mention of your name or the name of your organization each time we run this notice, and at **[inventorsdigest.com](http://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](mailto:info@inventorsdigest.com).

## IoT Corner

This year's Special Olympics World Summer Games were aided by IoT tracking devices.

At the games, held in Abu Dhabi in March, more than 10,000 athletes and participants wore **Sigfox** wireless 0G and Wi-Fi-powered devices. The goal was to keep the athletes—many with intellectual disabilities—safe and manage such a large group effectively. The devices had a button that users could press if they required help, and any lost people could be geo-located in real time.

Though it was a challenging environment for the deployment, devices aided in finding four lost athletes. Sigfox is now exploring other events for using the system. —*Jeremy Losaw*



## Wunderkinds

As an infant in India, **Anurudh Ganesan** had to be carried 10 miles by his grandparents to a clinic in southern India to get vaccinated—only to find that when they got there, the vaccines were useless because they were sitting on the counter and not being refrigerated. Anurudh

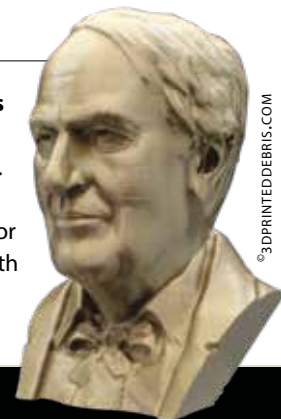
devised VAXXWAGON, which rigs together a plastic cooler and a bicycle so that the person delivering the vaccine keeps the container cold as he or she rides. He was 16 when he won the LEGO Education Builder Award at the 2015 Google Science Fair. He is now cofounder of Vaccine Innovations Inc., which is involved in developing a tool for last-leg vaccine transportation.



## What IS that?

It's **Easy Butter**—if not stringy and yucky—from Japan's Metex. The grater's main use is to prevent ruining your toast by having to spread hard, cold butter on it. LostatEMinor.com says: "Simply place the stick of butter in the device, turn, and ta-da! Strings of butter like angel hair gracing your toast with good vibes and eternal sunshine."

**9** The number of **design patents** received by **Thomas Edison** from among his 1,093 total U.S. patents. The other 1,084 were utility patents. His design patents were for phonograph cabinets and light bulbs with decorative features.



©3DPRINTEDDEBRIS.COM

## WHAT DO YOU KNOW?

**1** Which of these well-known songs is not in the public domain?

- A) "America the Beautiful"
- B) "Take Me Out to the Ball Game"
- C) "House of the Rising Sun"
- D) "Happy Birthday"
- E) All are in the public domain

**2** **True or false:** Copyright does not protect the mechanical or utilitarian aspects of a work.

**3** In which decade was the outdoor gas grill invented: the 1940s, or the 1950s?

**4** **True or false:** Insulin's Canadian discoverers sold the patent to their university for \$1.

**5** The notion that compound interest is the greatest invention ever has been attributed to:

- A) Albert Einstein
- B) Donald Trump
- C) Lee Iacocca
- D) Ben Bernanke

**ANSWERS:** 1. E. 2. True. 3. The outdoor gas grill was invented in the early 1950s by Don McGlaughlin, owner of the Chicago Combustion Corp. 4. True. A three-person team led by Frederick Banting sold the patent to the University of Toronto for a dollar apiece, saying profit was not the goal. 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](mailto:INFO@INVENTORSDIGEST.COM).

NAME (please print)

ADDRESS

CITY/STATE/ZIP

E-MAIL

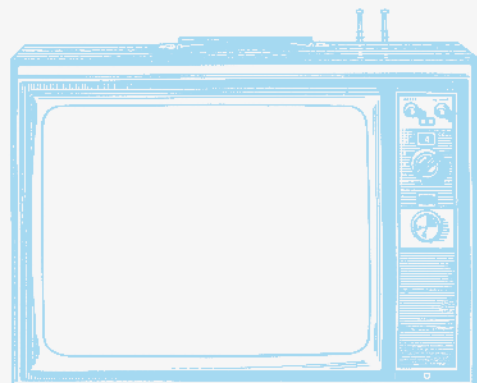
PHONE

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](http://SaveTheInventor.com)**

**SAVE THE  
AMERICAN  
INVENTOR**

