

Inventors

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DIGEST

PATENTLY POSITIVE

A DEFINING YEAR
FOR THE USPTO

PTAB PROCEDURE
REVISIONS HAILED

10 QUESTIONS WITH
MARY BONEY DENISON

The Millennial Factor
INVENTING IMPACT GROWS

Messenger Marketing
BUILDING YOUR SALES

'Stairway to Heaven'
CASE RETURNING TO COURT

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I Love a Parade— of Thanksgiving Trademarks



Welcome to the month in which pajama pants have added utility.

The Beekman Boys of reality TV fame began a Thanksgiving tradition of wearing the loose-fitting nightwear to accommodate their expanding stomachs after a Turkey Day feast. They even got a federal trademark for the term Thanksgiving Pants—earlier referred to on another TV show, “Friends.”

That got us thinking about other Thanksgiving trademarks. It's an even more timely subject in light of this month's interview with Mary Boney Denison, the United States Patent and Trademark Office's commissioner for trademarks.

The braintrust at Macy's have long known the value of a trademark for maximizing brand identification. Twenty years ago, they received U.S. Registered Trademark No. 2,206,890 for the phrase Macy's Thanksgiving Day Parade. (Trivia note: The first character balloon to be displayed at the Macy's parade was Felix the Cat in 1927, three years after the first parade. Felix was trademark registered in 1985.)

Intellectual property law firm Kelmchuk LLP got into the spirit of the holiday a few years ago by compiling a list of Thanksgiving trademarks, and has allowed us to share them. Not surprisingly, many of them involve food.

There's Thanksgiving Day Dinner, a dog food; Pilgrim's Dole, a beer; Tofurky, referring to foods, namely soy- and wheat-based meat and game substitutes; and Thanksgiving Balls, prepared entrees consisting primarily of mashed potatoes with turkey meat and stuffing that is breaded and fried.

And let's not forget Turducken, described on the Kelmchuk post as a “bird-within-a-bird-within-a-bird creation” that is a combination turkey, duck and chicken entrée.

This tasty menu represents a tiny sampling of the intellectual property protections that are a hallmark of our entrepreneurial system. Praise the patent office and pass the gravy!

—Reid
(reid.creager@inventorsdigest.com)

INGENUITY IS AMERICA'S MOST VALUABLE RESOURCE.

DON'T TREAT IT LIKE A CHEAP COMMODITY.

Our strong patent system has kept America the leader in innovation for over 200 years. Efforts to weaken the system will undermine our inventors who rely on patents to protect their intellectual property and fund their research and development. Weaker patents means fewer ideas brought to market, fewer jobs and a weaker economy. We can't maintain our global competitive edge by detouring American innovation.

**SAVE THE
AMERICAN
INVENTOR**

TAKE ACTION AT SAVETHEINVENTOR.COM

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Mary Boney Denison,
commissioner for
trademarks, U.S. Patent
and Trademark Office;
photo courtesy
of the USPTO

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BRIGHT IDEAS



Hex Solo

6-IN-ONE MESS KIT

kickstarter.com

Hex Solo is for preparing camping, hiking and picnicking meals. The six pieces are a 20cm non-stick, non-spill frying pan; 900ml nesting bowl; 250ml collapsible coffee/tea cup; multi-purpose prep box; Japan-crafted spatula, and an expandable, detachable spork with three levels of length adjustment.

Also available are the 9-in-1 Hex Duo (two bowls, cups and sporks) and the 18-in-1 Jumbo Kit (two pans, prep boxes and spatulas, and four bowls, cups and sporks).

Retail prices for each size kit will be \$54, \$62 and \$126, respectively. Shipping to crowdfunding backers is to begin in December.



MICRO

KEY ORGANIZER

slughaus.com

Marketed as the world's smallest EDC key tool, MICRO is designed to be a more compact organizer and replace traditional key chains.

Lighter than a quarter and made of stainless steel, it holds two or 10 keys and is also usable as a box cutter, bottle opener and prying tool. It has a built-in loop to attach to a car key fob.

Assembly is easy, using a coin, screwdriver or even your thumb.

MICRO's expected retail price of \$15 includes three key organizers. Worldwide shipping is expected to begin in March.



Volta XL

MAGNETIC CHARGING CABLE

launch.voltacharger.com

Volta XL improves on the original Volta by providing strong power delivery on USB-C devices. XL also fully supports 87W USB-C power adapter charging for the 15-inch MacBook Pro and 60W 13-inch MacBook Pro. OTG enabled, it lets you charge other smartphones.

The cable comes with a lifetime warranty and fast charging, an estimated 70 percent faster than regular cable. It detaches from your device instantly if you accidentally snag the cord.

The Volta XL cable set retails for \$45, with shipping to crowdfunding backers under way.

**"You can't use up creativity.
The more you use,
the more you have."**

—MAYA ANGELOU

ROXs

INTERACTIVE GAMING SYSTEM

playroxs.com

ROXs uses no screens, with the intention of getting kids and families moving and running outdoors. Its games encourage creativity and imagination.

ROXs is based on wirelessly connected pods that come with different sensors, lights and sound effects. The hand-sized pods are controlled by a mobile app that parents can control and features different games. Players must run between the pods in order to deactivate the sensors by tapping, shaking, moving or shooting (with a ball, a Nerf gun etc.) at the pods.

The system will retail for \$169, with shipping to crowdfunding backers set for December.



Glass Backboards: A Smashing Success

BASKETBALL INNOVATION HAS EVOLVED IN ITS 100-PLUS YEARS

BY REID CREAGER

A STRANGE LOT, this human race. We have evolved intellectually and culturally in quantum leaps since the beginning of time, yet we still thrill to seeing stuff break.

When Philadelphia 76ers center Darryl Dawkins shattered a glass backboard with a slam dunk in an NBA game 39 years ago this month, our pre-internet mass media couldn't replay it often enough. Dawkins' Chocolate Thunder destruction—his first of two such displays that season—was unthinkable when the first glass basketball backboards were introduced in the early 1900s.

No more breaking news

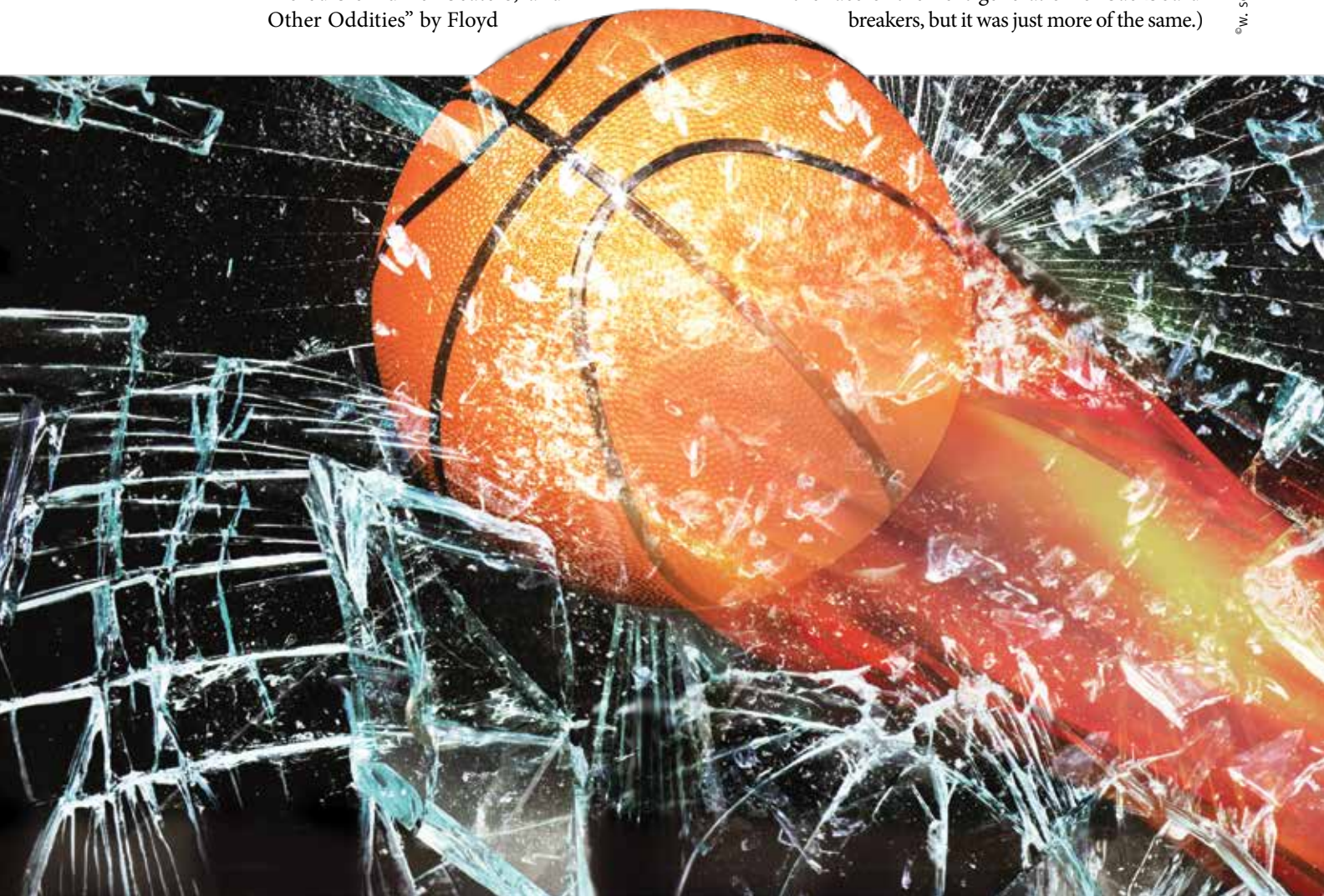
According to the book "Basketball's Most Wanted: The Top 10 Book of Hoops' Outrageous Dunkers, Incredible Buzzer-beaters, and Other Oddities" by Floyd

Conner, glass backboards were introduced in 1909 but banned briefly in 1916 due to a rule requiring white paint on all backboards.

The oft-unreliable Wikipedia is among numerous sources that report Indiana University was the first to use glass backboards, although the university denies that claim. Its school newspaper reported in early 1917 of a December 1916 game at Purdue University in which glass backboards were used.

It is generally agreed that glass backboards emerged because fans who were seated directly behind wooden backboards were complaining their view was blocked.

There was a time when 625 lbs. of force could shatter a backboard—a testament to the 6-foot-11, 250-pound Dawkins' legendary strength. (Shaquille O'Neal became the face of the next generation of backboard-breakers, but it was just more of the same.)



“During the warm-ups, I took a set shot, a harmless set shot, and crash, the glass backboard shattered.” —CHUCK CONNORS

Today’s backboards, made of tempered glass or Plexiglass that is shatter resistant, include a breakaway rim with a hinge and spring so that when a player dunks, the rim bends downward and quickly snaps back into a horizontal position once the player releases it.

NBA and NCAA rules stipulate that the backboard be 6 feet wide and 3½ feet tall, although the NCAA permits backboards as tall as 4 feet. Backboards must be flat and transparent.

Backboards have a 24-inch-wide by 18-inch-tall rectangle painted on the surface above the basket. The upper edge of the rectangle’s bottom line is to be perfectly parallel with the rim.

‘Rifleman’s historic shot

Although the demolition by Dawkins—who died in 2015 at age 58—is a YouTube staple, he wasn’t the first NBA player to shatter a glass backboard. That distinction went to Chuck Connors, the late star of TV’s “The Rifleman” who played pro basketball as well as major league baseball.

Connors’ “achievement” on Nov. 5, 1946, was even more of a fluke, because it happened during a simple pre-game warm-up shot. Apparently a piece of rubber between the glass and rim was missing, which caused the glass to shatter when his shot hit it.

Connors recalled the incident in an interview at sabr.org: “During the warm-ups, I took a set shot, a harmless set shot, and crash, the glass backboard shattered.”

The story goes on to report that Celtics owner Walter Brown scrambled to locate a replacement in order to play the game at the Boston Arena—not at the Boston Garden, where Gene Autry’s rodeo was playing. Brown sent publicist Howie McHugh in a truck to the Boston Garden to get a replacement backboard.

“Howie tells how the Garden’s backboards were stored behind the Brahma bull pens, and nobody was fool enough to challenge the bulls for them,” Connors said. “Howie found two drunken cowboys and slipped them a couple of bucks to go into the pen, dodge the bulls, and get a glass backboard out. If he hadn’t, we might still be waiting at the arena.”



Chuck Connors, “The Rifleman,” fired a historic warm-up shot.



INVENTOR ARCHIVES: NOVEMBER

Nov. 29, 1877: Thomas Edison demonstrated the first hand-cranked phonograph by shouting into a tube: “Mary had a little lamb. Its fleece was white as snow. And everywhere that Mary went, the lamb was sure to go!”

The phonograph etched sound waves into tin foil wrapped around a cylinder, making this the first speech ever recorded. Other inventors had produced devices that could record sounds, but Edison’s phonograph was the first to be able to reproduce the recorded sound.

Edison also foresaw the many possible uses of his invention. When he listed these 10 in *North American Review* in June of the following year, reproduction of music was not first on his list but fourth:

“Letter writing and all kinds of dictation without the aid of a stenographer; phonographic books, which will speak to blind people without effort on their part; the teaching of elocution; reproduction of music; the “Family Record”—a registry of sayings, reminiscences, etc., by members of a family in their own voices, and of the last words of dying persons;

“Music-boxes and toys; clocks that should announce in articulate speech the time for going home, going to meals, etc.; the preservation of languages by exact reproduction of the manner of pronouncing; educational purposes such as preserving the explanations made by a teacher, so that the pupil can refer to them at any moment, and spelling or other lessons placed upon the phonograph for convenience in committing to memory; and connection with the telephone, so as to make that instrument an auxiliary in the transmission of permanent and invaluable records, instead of being the recipient of momentary and fleeting communication.”



Messenger Marketing and Facebook Chatbots

ONLINE TOOLS USE APPS TO INCREASE CUSTOMERS

BY ELIZABETH BREEDLOVE

THE WAY WE COMMUNICATE is rapidly changing. Consider the number of text messages you sent in 2008 compared to the number you likely send today.

Also consider who you are texting. In the past month alone, I've sent or received communication via text message from my real estate agent, my son's physical therapist, a moving company, multiple restaurants, my doctor and a meal delivery service. It's undeniable that the way we communicate with each other and the way brands communicate with us is shifting; and convenient communication methods are becoming more important.

Entrepreneurs who want to keep successfully marketing their inventions must follow suit and learn to communicate with their target audience in ways that audience is already communicating. Enter: Messenger marketing.

What is messenger marketing?

It's using a messenger app to market to your customers. Messenger marketing has the same goals as any other marketing strategy: to raise awareness, gain leads and ultimately make sales.

One of the biggest challenges with messenger marketing is that consumers expect communication through messaging platforms to be near instantaneous. That's hard for any company to manage, but it's especially difficult for the inventor who may only have a handful of people working for him or her, if anyone.

Fortunately, marketing automation systems such as chatbots make messenger marketing easier than ever.

What are chatbots?

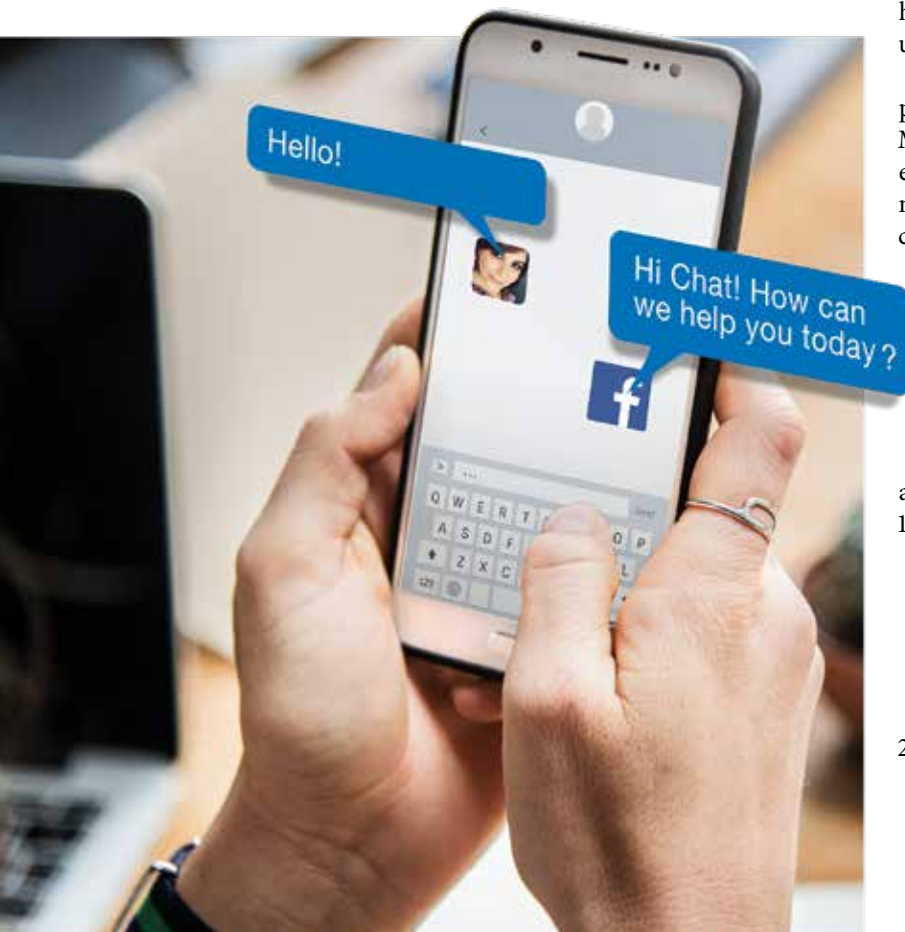
A chatbot is a chat program that uses artificial intelligence (AI) to engage with a company's audience by answering questions, providing information and helping consumers along their purchase journey, ultimately funneling leads into customers.

There are many different types of chatbots and places to use chatbots. But especially Facebook Messenger—with a reported 1.3 billion active users each month—provides a huge opportunity for business owners to use this technology to grow their customer base and increase sales.

What can chatbots do?

Chatbots can handle just about any aspect of marketing you need. But to understand what they can do, it helps to start by learning how they work. The specifics vary from bot to bot and campaign to campaign, but in general, this is how a chatbot sequence works:

1. The Facebook user completes an action that triggers the chatbot and enters it into the chatbot's sequence. This action could be as simple as sending your brand's page a message, or a bit more complicated like commenting on one of your Facebook Ads. Most chatbots offer a lot of flexibility here.
2. The chatbot starts (or continues) the conversation using Facebook Messenger. Some chatbots



ask questions that have open-ended answers; others provide multiple answers from which the user can choose.

3. The chatbot and the user continue their conversation in Facebook Messenger, with the bot gently guiding the user down the customer journey through pre-set, timed messages and prompts.

Keep in mind that these chatbots use AI to create custom, personalized experiences for each user. You won't be blasting everyone who sends you a message with the same response. Instead, the chatbot allows for logic branching and personalization, so the user can choose the type of information he or she wants to receive.

As you start to figure out your messenger marketing strategy, keep in mind the types of things a chatbot could handle for you:

- Nurturing leads by responding to messages, answering questions and providing the information needed to turn a lead into a customer.
- Delivering new content to your customers, such as a blog post, update or even an announcement of a major sale.
- Providing shipping updates. Customers can choose whether to receive tracking information and order updates through email or through Facebook Messenger.
- Scheduling appointments and phone calls with a member of your sales team.
- Accepting orders, thereby letting people shop directly from Facebook.

It's important to understand that you cannot push sales or promotions through your chatbot. It's against Facebook policy to send promotions without being prompted.

Should I set up a chatbot for my business's Facebook page?

Chatbots are incredibly helpful, but they aren't the right fit for every business. Before you spend valuable time setting up a chatbot, carefully consider how you're currently using Facebook, how your target audience uses Facebook, and whether you have the capacity to support a chatbot strategy.

How is your Facebook page performing? If you aren't posting new content regularly, begin there; it's helpful to already have an engaged audience in place before you start to use a chatbot.

More important, is your target audience on Facebook? If your audiences use Facebook heavily, even if it's more for personal usage than business, a

chatbot could be a great way to take your marketing to the next level. However, if your audience isn't on Facebook at all, it's best to focus your time and money elsewhere.

Additionally, before you decide to use a chatbot, carefully consider how much time you can devote to it. Setting up the chatbot initially may be the most time-consuming part. However, even with an automated bot handling communication for you, you'll still need to regularly spend time managing the bot.

It's important to create a good customer experience through every message your chatbot sends.

Tips for setting up a chatbot

First, decide what you want your chatbot to do. Will it provide shipping updates? Answer customer questions? Offer new content? Take potential customers through your sales funnel? Although you don't need to have all details sorted out yet, having an idea of what you want your chatbot to do will make it much easier to choose a chatbot program.

You can choose from many different third-party chatbot programs, so it ultimately comes down to which functions your business needs. Some platforms are easier to set up, others have more flexibility with what they can do, and others integrate with different messenger platforms. Carefully examine things such as price, functionality, reviews and more.

Once you've settled on a chatbot, begin creating your sequence. Remember, you'll be sending prospective customers on a journey with you through Facebook Messenger, so it's important that the chatbot's copy is clear, concise and engaging. Make the copy feel like a dialogue; keep it human, conversational and natural. Your messaging can be much more casual with a chatbot compared to other forms of marketing.

Most chatbot platforms are set up to make it easy for the average person to create an effective chatbot strategy. With a little thought and ingenuity and the help of a good chatbot program, you'll be well on your way to growing sales. 📈

Elizabeth Breedlove is content marketing 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.



Anatomy of an Invention

PERSONAL EXPERIENCE PROVES AN IDEA
MUST SURVIVE TOUGH QUESTIONS **BY JACK LANDER**

A FRIEND OF MINE, Rod, has a great little gadget called a Tile that hangs from his key ring. If he calls it from his cell phone, it beeps and guides him to his keys.

I don't have a Tile, and unless my cell phone is at its charging station I usually don't have a clue about where to find it. However, after years of anxiety about my misplaced car keys, I trained myself to hang them up on a cup hook I installed on a kitchen cabinet.

So, being an inventor, I came up with an idea for a cell phone holster—one that I could hang up below my keys. Voila! I haven't lost my cell phone in several weeks.

Some would say that it's not much of an invention, just a simple device that solves an annoying little problem. But so is a paper clip. In any event, my cell phone holster is a good model for many of the questions and trials we inventors face as we evaluate our inventions for their commercial potential and decide whether to invest in their development.

The first unknown

First, is it marketable? Unless we're inventing for the fun of it, we should start with a realistic assessment of its chances of being sold.

Even if we have no thought of producing and marketing on our own, someone is going to have to sell it. We can't expect a potential licensee to get interested in our invention unless he or she is convinced that it has a market channel and can be made and sold at a profit. Assessing marketability is generally a good first step because it is usually less expensive than making a prototype and/or filing for a patent.

My approach is to begin by asking strangers at random if they hang up their keys. Chances are that a person who doesn't want to hang up his or her cell phone as well.

A survey of persons exiting a supermarket or a mall is one way to get a reasonably good data. You are asking just one simple question, and you aren't trying to sell them anything. Emphasize this. People are rightfully suspicious of strangers who ask them questions.

A hundred positive answers should be sufficient. I figure that 1 in 10 is probably marginal, and maybe I would not go ahead unless I received at least that percentage of positive responses.

Next considerations

The next unknown is how many people who hang their keys would consider hanging up their cell phones if a product for that purpose were available. For this survey I would ask a second group, because you shouldn't promise to ask only one question and then ask a second. An even better approach might be to have SurveyMonkey do the survey for you. I've used the service previously and was pleased with the results.

OK, let's say that I ended up with a net of about 5 percent of the people surveyed saying they would consider buying a hang-up holster for their cell phone. The next question: Would a potential licensee feel that this was a worthwhile market, sufficiently profitable that he or she could pay me a 5 percent royalty and still make a profit?

I doubt it. My holster would probably sell for \$14.95 maximum, maybe only \$9.95. So it's not the kind of product that is likely to interest a licensee unless it has a very large, proven market.

But let's say that my price was higher and my market larger. What are my chances of getting a "bulletproof" patent?

My main features are the holster pocket, the extended tab for hanging, and a hole or hook of some

Optimism won't save the day if you don't have an invention with benefits for which strangers will pay your price.



sort for connecting to the cup hook. None of these features appears to be novel, and therefore probably not novel in combination. My only novelty is hanging up a cell phone that is usually laid flat on a desk or dresser. I suspect that a professional search would find only something that the patent examiner would disqualify as novel.

This leaves me the option of producing and marketing on my own. I prefer to patent and license, but I don't think my chances of success on that road are very high.

What about infringers?

Before I tell myself to drop the whole idea, I should at least investigate the cost vs. benefits of producing. My next question is, how much would it cost me to produce?

This is the kind of product that should be injection molded of a firm rubber, or perhaps a suitable plastic. Either of these will require a mold that might cost \$25,000 or more. Hmmmm. That's a huge risk for a product that may or may not sell well enough to pay back the investment, plus earn a profit.

I could produce the holster as an assembled product, as I did when I made my prototype. It's labor intensive, but at least I won't have to mortgage the farm to pay for a mold. On the other hand, if it sells better than I expect, I could then transfer production overseas. And if the sales go viral, I can afford to invest in a mold.

Hold on, Jack. You're dreaming again.

If sales go viral, guess what? You invested your \$10,000 patent money in setting up production, remember? Anyone can copy you, and the people

who produce these kinds of products have been watching your sales. They're going to jump in, and they'll be selling something as good or better than yours for about two-thirds of your selling price. Even if you had your patent in hand, you'd be playing "whack-a-mole" with infringers until you ran out of money.

Use realistic optimism

Is the business of inventing always like this? No. But it isn't a piece of cake, either.

You've got to be very realistic at each step before plunging in. We inventors often suffer pathological optimism. That's good in one way. Success requires optimism and a positive attitude.

But optimism won't save the day if you don't have an invention with benefits for which strangers will pay your price. And patents are only as good as the ethics of your would-be competitors.

I've had second and third thoughts about my holster. You're free to copy my design and take it to market. I'm counting on the honor system for a 5 percent royalty—or is that too optimistic? 🐾

Too many business and infringement risks could make my cell phone holster a money pit.

Jack Lander, a near legend in the inventing community, has been writing for *Inventors Digest* for 22 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.



Hey, Cut That Out!

5 TRAITS THAT STIFLE INVENTOR SUCCESS **BY HOWIE BUSCH**

MOST INVENTORS are wonderful people, but I find that many exhibit some traits that are holding them back from getting their products to market.

As someone who has coached a number of inventors, I've seen it all. And since I'm calling out others and asking you to look in the mirror, I might as well come clean myself.

I may have exhibited most of these characteristics when I was starting out and even still every now and again, but I do everything in my power to avoid them. You should, too!

The paranoid inventor

These folks are so afraid to tell anyone about their product or idea that they stop just short of asking their mother to sign a nondisclosure agreement before telling her about it. I run into these folks pretty often. In fact, I used to be this guy.

I may not have asked my mother to sign an NDA, but I did ask graphic designers and other service providers before I'd share my product with them.

All that did was slow my ability to get my product to market.

I'm not saying there's no way someone would steal your idea. I just find it highly unlikely.

It's really hard to get a product to market. You don't want to run around shouting your idea from the rooftops or share it with everyone you come across, but it's pretty unlikely some random graphic designer will steal it. Even if he or she does, will that person even come close to having what it takes to get it to market?

So, you have to make some calculated and educated decisions on who and when to ask for that NDA—and when you can avoid it altogether. A big drawback to keeping your new product so close to the vest is that no one can help you.

By sharing it with people and putting it out there, you give it energy and forward momentum. You never know who knows who, and who might be able

to help or put you in touch with someone who can.

I can't tell you how many times I "put it out there"—and the universe reacted. In fact, I wouldn't have gotten any of my products to market without it.

Caveat: The above depends on the category for which you're inventing. If you're creating a complex product, such as something for the medical industry, the automotive industry, technology or anywhere else where strong IP is essential, you do need to be more concerned about NDAs and confidentiality.

Pro Tip: Your provisional patent application or fully issued patent are as much a source of protection as anything else.

Pro Tip 2: Try to follow up phone calls with emails summarizing what was discussed, and try to send documents and attachments via email and LinkedIn. That establishes a paper trail—just in case you run across some folks with bad intentions.

The 'no-brainer' mind-set

I can't tell you how many inventors I've heard say, "My product is a no-brainer."

Let me let you in on a little secret. Everything is a "brainer."

Every product takes tremendous work, energy and focus. If you're looking to license it, a company has to dedicate not just money but time and staff to bring it to life. That alone makes it a "brainer."

Telling everyone your product will make them millions and that it's a no-brainer makes you lose credibility. You really have no idea how it will do.

Being passionate and enthusiastic about your product is great, even necessary. But I can't tell you how many times, early on, I would think one of my products was a no-brainer ... and then I couldn't license it, or it wouldn't sell well if I did.

Pro Tip: Sell people on the benefits of your product for their customer. If you can solve a problem and people are willing to pay for that solution, you won't have to over-hype it.



The giver-upper

Do you get discouraged easily? In a word, don't.

As an inventor, you can either develop a thicker skin or look for another career—because rejection is part of the game. Virtually all successful inventors and entrepreneurs have been rejected.

I've coached students who would get discouraged after a couple of rejections, but once they started to embrace it and not fear it, they developed that scar tissue you need. And the attitude becomes "Every no gets you closer to a yes."

Pro Tip: With every "No" (and a response to your inquiry), you have the opportunity to develop a relationship within the industry for which you're inventing. Ask people precisely what about the product made it a no for them. That way, you may be able to tweak it and turn that no into a yes.

And you should always ask if you can submit future ideas. Keep that door open.

Getting discouraged isn't limited to rejections. I've seen plenty of inventors get discouraged during their research phase.

What would you do if you found a similar product on the market already? Or maybe you found a patent that already exists. Would you quit?

Pro Tip 2: Instead of getting discouraged, see if you can make yours better than what's on the market or already patented. Design around it, so to speak. And if you can't, I've coached inventors to reach out to the patent holder and cut them in on the deal—because patent holders are often not adept at getting the product to market, and they may very well welcome the partnership.

In fact, I was advising a company that developed a product (cooling towels) by licensing another company's patent as the key ingredient of their product. They became a huge seller, with major deals and end-caps in Bed Bath & Beyond, Dick's Sporting Goods & Lowe's (to name a few).

So, don't be easily discouraged. Of course, sometimes you have to move on to another product because not every product will succeed, but if you believe in it enough, fight through and find a way to make it work!

The angry inventor

I meet a lot of inventors who think that everyone who won't do business with them or doesn't get back to them is a jerk. Wrong.

If you're looking to license your idea, realize that not everyone will want, or be able, to license your idea.

It could be that these people don't have the bandwidth or resources at the moment, whether it's financial or human resources. Or maybe they think your invention fits too narrow a niche. Or maybe, just maybe, they don't love the product. That doesn't mean they're right ... but that also doesn't mean they're a jerk.

If you're looking to manufacture and a retailer decides to pass on it, realize there the company only has so much shelf space. Maybe the price isn't a fit, or the retailer doesn't want to take in a single SKU/item from a manufacturer.

For one of my products, my ideal licensee didn't get back to me, so I moved on. Honestly, I was a little upset. But a year later, I reached out again and

within a month, we had a deal finalized. Timing can be crucial.

Pro Tip: Don't be afraid to reach out to people, but don't hang high expectations on strangers. Just be appreciative of the people who do get back to you.

The ones who don't get back to you or reject you, please keep in mind that it's not personal. Holding onto the anger and resentment will only hurt you. Lower your expectations of people and remain positive. Everyone will be more drawn to that kind of energy.

The perfectionist

Most inventors tend to love the whole process of creating and developing their product. They continue to work on it and make sure it's perfect. They'll then go through the same tinkering and perfecting of their video or their sell sheet.

And they tinker ... and then tinker some more, searching for perfection.

Perfection is the enemy. It is unlikely that the product that you create, even if you're perfecting it, will end up being the final product.

I've been guilty of this, but I eventually realized that I was just really tinkering because I was worried that the product

might get rejected. I figured that if I kept tinkering and perfecting, nobody could reject it—or me.

The more you tinker, the more momentum you lose. You'll start to lose interest in the product, and it gets tougher to "get it out there."

The law of inertia states that a body at rest tends to remain at rest unless acted upon by an outside force. You have to be that outside force, so don't let your product idea remain at rest for too long.

Pro Tip: When it's good enough, get it out there. I've tinkered with product development, with sell sheets, with product names. More often than not, even when I successfully licensed the product, things that I spent months perfecting ended up being changed. Eventually you'll realize that perfection doesn't exist. 🍷

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."



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Fighting Back Against Attackers

MOTHER OF 5 DAUGHTERS DEVELOPS
TINY, WEARABLE PEPPER SPRAY **BY EDITH G. TOLCHIN**

KRISTI GORINAS was featured in the January 2013 *Inventors Digest* (“How I developed a product on my own”), when she spoke about her experience in developing the GoWithMe chair.

Now the Georgia mother of five daughters has a new, totally unrelated invention: a wearable, self-defense item a little over 1 inch in diameter that is cleverly named “Defendables.” Given the growing momentum of the #MeToo movement, this is a timely innovation.

Edith G. Tolchin (EGT): What is your background, and do you consider yourself a serial inventor?

Kristi Gorinas (KG): Prior to my inventing journey, I was a Human Resources professional for over 20 years. I have continued to consult in HR during my inventing years to help finance several product ideas.

I do consider myself a serial inventor, having dozens of product concepts but capable of only bringing a handful to market. However, several inventor friends have books with hundreds of inventions, so it’s hard to compete with that type of prolific idea person.

EGT: Why and how did Defendables come about?

KG: During a consulting gig, I noticed an end-cap filled with pepper spray. I casually said to myself, “I have one of those ... somewhere in the house or garage and really should take it on my jogs.” As I stared at the conventional canisters of spray, I realized that I don’t keep it handy because it’s not convenient to carry. I actually carry weights as I jog and wouldn’t have a free hand.

Additionally, if I did carry it in my purse or car, I’d have to search for it at the time of attack. And that brief conversation with myself sparked a fire to design something more convenient, discreet, smaller and even more fashionable.

The most important feature to me was for the product to be “wearable,” because I like simplicity: Take a shower, dress and attach a wearable pepper spray pod anywhere on me for easy access when I need it most. As a survivor of sexual assault and now a mom to five girls, I knew this product was a mass-market product, a necessity for women and men, seniors and those with special needs.

EGT: How does it work?

KG: The plastic pod has a trigger that requires some pressure to move forward. The pepper spray dispenses in a cone shape, spraying out at least 3 feet.

My intention for this miniaturized pepper spray pod was for use in your personal space: 1-3-foot distance when you shoot the spray. Research confirms that in most cases, you are not aware of a physical attack until someone is touching you, therefore in your personal space. At that time, anything you are holding (phone, purse) most often is dropped as you respond with your hands to defend yourself. With the pod attached to your bra strap, shirt or pants, you can reach for the pod to spray the attacker.

I have also designed a patent-pending ring version which works similar to how Spiderman sprays his web. The pod is attached to a ring and worn discreetly in

Defendables has the key feature of being wearable, which provides convenience as well as quick access when an attacker approaches.



“As a survivor of sexual assault ... I knew this product was a mass-market product, a necessity for women and men, seniors and those with special needs.” —KRISTI GORINAS



the palm of your hand. With the ring accessory, you don't even need to grab the pod off your clothing. Just point and spray.

EGT: Did you get help with your prototype(s), or need many before you got it right?

KG: I am not an engineer nor a graphic designer. I network and find the talents needed for industrial design and mechanical engineering.

We are currently in our final design and testing phase, having gone through a dozen design changes and five or so prototypes. Although starting out my focus was in how fashionable the pod could look, I've transitioned my focus to functionality. It first must function properly 100 percent of the time and since it's designed to be worn discreetly, the fashion part of Defendables will be a close second in the next generation of pods.

EGT: Are you currently manufacturing? Domestically or overseas?

KG: We will import the plastic pods to the United States and fill them with the proprietary pepper spray, then package and ship from the U.S.

EGT: Can you share your experience in working with overseas factories?

KG: My first juvenile product inventions were imported from China, after trying to make them here in the United States. I have worked with Chinese and Taiwanese factories for the most part.

During the 10 years of importing, I have found that utilizing a native to the factory is most important to ensure accurate communications. I lost nearly 10 months of design time with my diaper bag designs because I was trying to communicate directly with the factory and dealing with language and time barriers.

EGT: Is funding difficult for this type of invention? Did you have any help?

KG: Unless you are independently wealthy, which

I am not, funding has always been the biggest barrier to execution for any of my products. That's why in my interview for *Inventors Digest* in 2013, I stated that I would never bring another product to market again on my own.

But for such an important product like Defendables, I am back on the path of funding the entire project on my own—using many different personal outlets for funding. Investors aren't lined up on the street corners, and I've found most are investing solely in IT and apps. Finding the right consumer goods investor has been a big challenge for me. I'm still actively searching for one!

EGT: Was developing Defendables different from the development of your children's chair invention?

KG: Yes, very different. I've had eight years of experience, mistakes and accomplishments to refer back to in streamlining the design, engineering, testing, packaging and scaling processes.

EGT: What difficulties did you have?

KG: The difficulties always seem endless. Besides the lack of finances, losing my co-founder and trying to put together the right team who will work for sweat equity, my own mental exhaustion and stress begins to take its toll.

Bringing a consumer goods product to market from a napkin takes 10 times as long as you want it to, and 10 times as much money as you could ever plan. Having patience, perseverance and prayer is the only way to make it through. Knowing the struggles upfront and getting a good night's rest help to push through those daily struggles. Validation of the product from industry experts is also critical to ensure the product will be a success.

EGT: What was your patent experience?

KG: As a one-person company, I rely on experts in every field to advise and assist me with each step of the design and patent process. This has

not stopped me from making horrible and costly mistakes, though.

Oftentimes, the patent process becomes last on the list of priorities due to money and time constraints. Don't make those same mistakes. Work with a patent agent (attorneys tend to be much more expensive) to understand the absolute correct timing to file a provisional patent application. Oftentimes you can file this on your own, and there is also software as well as templates available to assist. Plan to spend at least \$500 getting questions answered and to file the P.A.; it's a necessity.

EGT: Have you begun to sell Defendables?

KG: I am hoping to be on the market sometime soon.

EGT: How will the product be packaged and sold?

KG: Defendables will utilize a pepper spray distributor who has current retail distribution in all major retailers in the United States and internationally. This will ensure a successful and scalable product.

EGT: How are you handling your own PR?

KG: At this point, I am handling every aspect of the business with the help of consultants for design,

packaging and engineering. My goal is to partner with a large PR firm to assist with the very important message to protect oneself from harm and to "Be Your Own Hero."

EGT: Are you planning other Defendables-related products?

KG: Yes, we have many line expansions for Defendables to include GPS/emergency notification, as well as a line for kids and other types of personal defense products.

EGT: Do you have any advice for novice inventors?

KG: Research, research, research your idea prior to spending any money to bring it to life. Ask friends to research for you in case you missed something. And my mantra is "Patience, Prayer and Perseverance." 🙏

Details: defendables.com

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



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DEVICE REDUCES THE FRUSTRATION OF REMEMBERING NUMEROUS LOG-INS **BY JEREMY LOSAW**

COMEDIAN John Mulaney said earlier this year that “The world is run by robots, and we spend most of our day telling them we’re not a robot just so we can log on and look at our own stuff.”

Emil Rodriguez gets it, but he takes the problem seriously.

His firm, Xolutronic, designs electronics for clients from its office in the Dominican Republic. The team uses a variety of services that require passwords and was wasting a lot of time remembering, forgetting and resetting them.

Rodriguez and his company created and built a product called the Passport that securely stores passwords for multiple accounts, reducing the hassle of having to remember so many passwords.

The Passport is a physical device, meant to live on a keychain that securely stores passwords and lets you automatically log in to various accounts. It connects to devices via Bluetooth or USB and is compatible with all operating systems, using AES-256 encryption for maximum security.

The device can store up to 128 different account passwords, which are accessed via the touchscreen on the Passport. Users deploy passwords by navigating to the login screen on their device, unlocking the Passport with their unique icon-based lock code, then navigating and clicking on the icon of the service they are trying to access. The user name and password are then automatically filled into the login screen.

Launch challenges

Around the time that Rodriguez was realizing the ongoing issue of remembering multiple passwords, he was seeing the power of crowdfunding as a way to launch products. He was particularly intrigued by a product called Makey Makey, an electronics development kit that raised almost a half-million dollars.

Rodriguez desperately wanted to develop his own product to test the platform, so he did a design challenge in his office. The team brainstormed ideas and filled a room full of sticky notes, and the problem of forgetting passwords came to light.

“A lot of the guys here were forgetting their passwords and asking me to reset them,” Rodriguez recalls. “It was painful for me ... and then it was painful for everyone else to come up with passwords.”

Because he had a staff of electrical engineers at his disposal, the first prototype came together very quickly. They had so much experience designing

The Passport can store up to 128 different account passwords, which are accessed via the device's touchscreen.



Emil Rodriguez's team overcame challenges involving crowdfunding, manufacturing and filling orders from a foreign country.

their own printed circuit boards that they did not bother doing a breadboard version. They designed the board and had it made in just a couple of weeks. The first version used a monochrome screen to interface with it.

The electronic design was easy, but getting the product launched from the Dominican Republic was more difficult. Fortunately, team members were invited to attend a TechCrunch Disrupt event, which is a launchpad for hardware start-ups.

They brought their prototype with them and got feedback on the design and price, as well as meeting many other entrepreneurs with crowdfunding experience. In particular, they met an Israeli marketing firm specializing in crowdfunding marketing that gave them advice and worked with them during the campaign.

The other big hurdle was that the Dominican Republic is not an approved country from which a campaign could be originated. But Rodriguez's cousin living in New York was able to help him set up a U.S. base of operations from which to launch the campaign.

A shocking setback

The team made some key modifications before the launch, adding a color touchscreen harvested from a smart watch and building a beautiful housing for the product. The group coded just enough functionality for the campaign.

It also procured a Dominican patent, though it did not pursue U.S. patent protection due to concerns about the expense. The Passport was launched on Kickstarter in 2015 and raised more than \$100,000.

The race was now on to get manufactured units to backers. This came with significant hurdles.

The biggest challenge was sourcing the screens. Rodriguez used a sourcing site to find a factory. But just before wiring the money, he paid for an inspection

of the plant and got an unwelcome surprise: It was out of business.

"It was furnished, but there was no one working there," he says.

This set back the manufacturing at least two months while he identified and vetted a new screen supplier. There were also issues with the plastic case, as the painted finish on the chrome areas on the first run was not done to the team's satisfaction. Fortunately, the PCB assembly house for the invention was just a few minutes down the road on the outskirts of Santo Domingo, so the team had full control over the quality control process before shipping units.

Filling the Kickstarter orders was no small task. Shipping each crowdfunding backer's unit individually from the Dominican Republic was far too expensive. The solution was to freight master cartons of the Passport to a family member's house in Florida. Once there, one of the Xolutronic team flew there and fulfilled the individual units from the States.

Having maneuvered the many obstacles it took to get the product listed on Amazon, Rodriguez and his team are seeing steady sales growth. Now that they understand the full landscape of how to get a product designed, manufactured and launched from the island, they are planning a product that may be a second generation of the Passport or another connected device. 📱

Details: xolutronic.com



Emil Rodriguez, shown with his wife, Heidi, is planning a product that may be a second generation of the Passport.

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



Patently Positive

A DEFINING YEAR FOR THE USPTO **BY REID CREAGER**

“IF YOU DON’T LIKE WHAT’S BEING SAID, CHANGE THE CONVERSATION.”

That memorable line from the TV show “Mad Men” has had unmistakable relevance—and urgency—for the United States Patent and Trademark Office.

In the past several years, the storied government agency endured the fallout from findings that more than 400 of its patent examiners cheated on their timecards, costing taxpayers about \$18 million in potential waste; concern and outrage over its Patent Trial and Appeal Board that, through inter partes review proceedings that challenge the validity of patents, is often perceived as favorable to corporate infringers; confusion over what is patent-eligible subject matter; and speculation about USPTO Director Michelle Lee’s sudden resignation in June 2017.

Most damaging overall had been a growing sense for much of the decade that patent owners’ rights were being eroded. In explaining the United States’ fall to 12th place in its annual Global IP Index earlier this year, the U.S. Chamber of Commerce basically said that the infringers are winning.

“Innovators and creators face a challenging environment for protecting their IP,” it said. “Patentability standards and patent opposition procedures continue to create uncertainty for rights holders.”

Yet the nature and tone of conversation about the USPTO has improved

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in 2018. There has been no slick-as-Don Draper's-hair PR campaign from the patent office, no dramatic overhauls, no promises that would be impossible to keep.

What there has been was the USPTO's public acknowledgement that some of its internal processes and bodies warranted scrutiny and change—and action that backed those words. There was a 10 millionth patent celebration that captured the nation's imagination while reminding its people about the major role that patents play in our economic system and entrepreneurial spirit. Perhaps most important, there was Senate confirmation of Andrei Iancu as the new leader of the USPTO.

Action beyond talk

When Iancu began as undersecretary of commerce for intellectual property and director of the USPTO in early February, he said all of the right things about the crucial role of the U.S. patent system in the world economy and how he would oversee changes to restore faith in that system. He came with a sterling reputation and proven experience in commercial litigation and intellectual property law.

IP experts were cautiously optimistic but said action would be the true barometer of progress. They didn't have to wait long: On March 29, USPTO Solicitor Nathan Kelley filed a motion with the U.S. Court of Appeals for the Federal Circuit seeking to withdraw as intervenor in the Telebrands/Bunch O Balloons infringement case. He explained that Iancu decided “not to advocate for a particular approach in this appeal” because the USPTO was actively reconsidering the PTAB's approach to claim construction and indefiniteness—unmistakable confirmation that PTAB practices would be under review.

A couple weeks later, in his first public speech, Iancu acknowledged a shifting tide against patent owners and pledged to both create a new pro-innovation, pro-IP dialogue and increase the reliability of the patent grant. Later, while testifying before Congress, he said the PTAB was a candidate for reform.

April brought new USPTO guidance relating to patent-eligible subject matter under U.S. Patent Code Title 35, Section 101. The memorandum

said the USPTO is determined to provide “clear and predictable patent rights” in terms of subject matter eligibility and may issue “further guidance in the future.” The agency later issued other guidance memos in the wake of individual court decisions.

Louis Carbonneau, founder of Tangible IP and a monthly contributor to *Inventors Digest*, is among those who have lauded Iancu's efforts with regard to subject matter eligibility and an improved patent climate overall. He wrote that Iancu is “unabashed in his desire to tackle the Patent Act Section 101 beast with the goal of returning some certainty to what actually constitutes patentable subject matter.”

He continued: “It is clear that Iancu has completed the diagnosis part of the job and is ready to push an agenda that should re-establish a more balanced relationship between patent rights holders and the legal system.”

Slowly, the hulking shadow of the “patent troll”—a derogatory term referring to the use of patent infringement claims to win court judgments for profits—began to lighten. Growing bipartisan support of the STRONGER Patents Act, filed in Congress in March, continued the momentum.

No. 10 million

Media buildup and speculation about when U.S. utility patent No. 10 million would issue was as exciting as the milestone itself. The USPTO took advantage of the occasion to create a 10 millionth patent website and chronicle the rich history of patents, the office's 200-plus-year standing despite devastating office fires and wars, and the colorful figures who have been essential to the process. In June, *Inventors Digest* produced an eight-page section—with the help and endorsement of the USPTO—to help commemorate the occasion.

Legal blogs in particular were immersed in the exercise of predicting the date of the big patent. IPWatchdog broke down 2018 patent grants into weeks while correctly arriving at a date of June 19, also based on the fact that the USPTO only issues patents on Tuesdays.

Amid the excitement, IPWatchdog founder Gene Quinn—who also contributes monthly news stories

From left, USPTO Director Andrei Iancu, Secretary of Commerce Wilbur Ross, President Donald Trump, inventor Joseph Marron, and Raytheon CEO Thomas Kennedy commemorate the signing of U.S. patent No. 10 million in the Oval Office.

and analysis for *Inventors Digest*—wrote that “optimism (for a better patent climate) is high, and hope is real. People really believe that Director Iancu is about to bring meaningful reforms.”

The milestone patent was issued to inventor Joseph Marron for “Coherent Ladar Using Intra-Pixel Quadrature Detection,” technology that improves laser detection and ranging. Its issuance featured an elegant, carefully considered and conceived new patent cover design, the first in 33 years. President Donald Trump became the first president to sign a patent since Jimmy Carter in 1976.

PTAB changes begin

More steps toward change came in late summer. On August 13, the USPTO issued an update to the Office Patent Trial Practice Guide, incorporating PTAB practices and providing further explanation of certain aspects. Further revisions are expected.

Arguably of greater note, on September 20 the USPTO said the PTAB “substantially revised its standard operating procedures regarding paneling of matters before the PTAB and precedential and informative decisions.” The assignment of judges in particular had been a source of some criticism.

Reaction in IP circles was almost universally positive. (Story, Page 28.) “These new SOPs are a major change to how PTAB panels will be comprised, and how precedential opinions will be designated,” wrote Quinn. “Given Director Iancu’s speeches, actions and apparent desire to have a more patent owner and innovator-friendly Patent Office, these revisions will likely be game-changing.”

The TechPats blog wrote that “Perhaps most important with the ... update(s) is the understanding that the USPTO and PTAB are acting more uniform and that the Director is the clear head of the Office.” TechPats noted the proclamation in a September *Forbes* magazine story that “There’s a new intellectual property sheriff in town.”

Not every major development this year has been pro-patent: The long-awaited April 24 decision in *Oil States Energy Services, LLC v. Greene’s Energy Group, LLC*, which upheld the constitutionality of inter partes review proceedings, was a letdown for those hoping to see the end of IPR. (The Inventor Protection Act, a bill introduced into the House

of Representatives on July 26, seeks to help undo some of the effects of recent federal court rulings that have hurt the ability of patent owners to enforce their patent rights against infringers.)

So TechPats and others are taking a wait-and-see approach in terms of whether patent owners will see lasting change. Much remains to be done. The threat of knock-offs is still a crippling disincentive and reality for many inventors; expenses associated



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GOOD NEWS COMES IN THREES

Three major dates that helped change the conversation about the United States Patent and Trademark Office in 2018:

February 5—By a vote of 94-0, Andrei Iancu was confirmed by the United States Senate to become the director of the United States Patent and Trademark Office.

June 19—Culminating weeks of national speculation, Joseph Marron was issued the 10 millionth utility patent in U.S. history for “Coherent Ladar Using Intra-Pixel Quadrature Detection,” technology that improves laser detection and ranging.

September 20—The USPTO announced a series of changes to substantially revise standard operating procedures at the long-embattled Patent Trial and Appeal Board.



with obtaining and maintaining a patent are considerable; and rulings still often favor deep-pocketed, corporate infringers over small inventors who are simply trying to protect what's rightfully theirs.

No major institution will ever be free of issues, including the patent office. But many developments this year are promising as the USPTO works to further the ideals of creativity and the entrepreneurial spirit.

Pages reveal our future

Such energy and optimism was well conveyed in a recent writing on IPWatchdog.com by John White, director at patent advisory and finance firm Soryn IP.

"Be amazed at what the patent system has wrought. If you ever want a pick-me-up, flip through the first 50 pages of any recent Official Gazette from the PTO. Just look at what is issuing week to week. Astounding. The scope and creativity revealed in those pages is impressive.

"Simply put: These pages reveal the future; and, the owners of that future. Everything you rely on today, i.e., your phone, your monitor, your car, your pharma, your food prep and delivery, your mattress, your digital existence, etc., was conjured up and protected a decade back, when you were doing something else. ...

"In addition, these patents spawn the alternative futures that can also come to exist. You see, people other than me read patents as well. I can relate anecdote after anecdote of client companies whose engineers have pored over the patents of others, and taken entirely different routes to a similar future. Also, patented. Which, in turn, led to more creativity, etc. They took the alternative route because they wanted to innovate, or were forced to in order to avoid an infringement complaint.

"You get the picture. Protected innovation sets the stage for more of the same. Unknown and unknowable to the originators of one variant, they are directly responsible for the emergence of more variants. More futures. The market will decide who chose the better path." 📦

After spending some time diagnosing the institutional problems facing U.S. patent holders, Andrei Iancu has overseen the beginning of some important changes.

IP experts were cautiously optimistic after Andrei Iancu was named director of the United States Patent and Trademark Office but said action would be the true barometer of progress. They didn't have to wait long.



Moving Closer to the Same Page

USPTO'S REVISED PROCEDURES FOR PTAB ARE A WELCOME STEP TO UNIFORMITY, TRANSPARENCY **BY GENE QUINN**

THE ONGOING ISSUE of uniformity within the United States Patent and Trademark Office, and having the Patent Trial and Appeal Board follow the office's guidance, was raised in August at a Patent Public Advisory Committee meeting.

USPTO Director Andrei Iancu addressed the concern by Bernie Knight, former USPTO general counsel and current PPAC member, with a smile. "Let me just state the obvious: We are one agency."

At that time, I wrote: "If Director Iancu can truly get the USPTO to operate as one agency on the same page, that would be a tremendous legacy."

It would appear that the director has come up with a process to deliver on his often-stated desire for uniformity, predictability and for the office to be united—including the PTAB.

The office announced on September 20 the substantial revision of Standard Operating Procedures for the paneling of matters before the PTAB, and precedential and informative decisions. These will be known as SOP1. The revisions deliver upon the repeated promises of Iancu to increase transparency, predictability and reliability across the USPTO (SOP2).

These SOPs update the procedures based upon feedback the office received from stakeholders,

courts, legislators, and six years of experience with America Invents Act trial proceedings.

The new SOPs are a major change to how PTAB panels will be comprised, and how precedential opinions will be designated. Given Director Iancu's speeches, actions and apparent desire to have a more patent owner and innovator friendly patent office, these revisions will likely be game changing.

SOP1: Assigning PTAB panels

Revised SOP1 explains the new procedures for panel assignment and for informing parties regarding panel changes. It also explains the process for designating panels with more than three judges, and notes that such panels should be rare and will only occur with the approval of the director.

SOP1 also ends the practice of expanding PTAB panels without notice to the parties or the public, what has been referred to as "phantom expanded panels." SOP1 also addresses the random changing of panels after the entry of a decision.

Another provision addresses the important issue of conflicts of interest. In the past six years, there have been instances when administrative patent judges (APJs) of the PTAB have decided cases dealing with

former litigation clients, which for a lawyer would present an obvious conflict of interest that would lead to disciplinary sanctions.

The PTAB does not, however, have any specific Code of Conduct that applies to APJs that is akin to the Judicial Code of Conduct applying to federal judges. Of course, APJs on the PTAB are lawyers and, as such, are not absolved of their ethical obligations as lawyers. Unfortunately, that did not prevent one APJ from hearing and deciding 25 post-grant challenges in which his former litigation client was the petitioner.

SOP1(III)(B) requires each APJ to provide a full list of conflicts, requiring that conflicts list to be updated as necessary, and preventing the paneling of an APJ “on any case having a conflict.” Of course, the ultimate responsibility is with the APJ. “

SOP1(III)(L) addresses the issue of panel changes after a panel has appeared and taken jurisdiction of a case, which has become a concerning issue in several cases. “For all proceedings in which the panel has appeared (e.g., in a decision or hearing), panel changes are disfavored.”

The rules do, however, take into account the necessity for recusal should a conflict become apparent, gives the PTAB the authority to reassign APJs to meet deadlines, and recognizes that judges may be unavailable for a variety of reasons including maternity leave, paternity leave, sick leave, or retirement.

SOP1(L)(4)(a) also requires the panel assigned to explain why one judge has been changed in the event a change must be made. This simple procedure is customary in virtually every court in the country but has not previously been the practice of the PTAB.

Explaining the absence or change with a footnote increases transparency and is in keeping with legal norms. It will also prevent conspiracy theories and questions, and is a substantial but easy step toward greater transparency.

SOP2: Bringing USPTO uniformity

Revised SOP2 creates a Precedential Opinion Panel (POP) that is selected by the director and typically comprising the director, the commissioner for patents, and the chief judge of the PTAB.

The POP will serve two primary functions: (1) it may be convened to rehear matters in pending trials and appeals—for example, on issues of exceptional importance; and (2) it may assist the director in determining whether a decision previously issued by the PTAB should be designated as precedential or informative.

It is expected that the POP and the procedures described in revised SOP2 will, in most cases, replace

the prior practice of expanded paneling under SOP1, with a process that is more transparent and predictable. It is also expected that revised SOP2 will result in more decisions being designated as precedential.

Although SOP2 envisions parties requesting rehearing and consideration from the POP, or the commissioner for patents, chief judge or any APJs recommending consideration by the POP, SOP2 says: “No decision will be designated or de-designated as precedential or informative without the approval of the Director.”

SOP2 also includes procedures for making routine panel decisions precedential. An Executive Judges Committee consisting of five members will make recommendations to the director with respect to which decisions should become precedential (i.e., binding on all APJs and panels) or informative (i.e., decisions that set forth norms that should be followed in most cases absent justification).

This Executive Judges Committee will include the chief judge, deputy chief judge and the operational vice chief judge, in order of seniority and based on availability.

Impressions

The buck will now stop with the director insofar as matters of the PTAB are concerned. Iancu, and his successors now have the power to truly create uniform, all-office policy that will not only need to be followed by patent examiners but must also be followed by the PTAB.

The director has the power to pick which decisions are precedential and will have binding effect on the PTAB. This will force the PTAB to follow office rules, regulations and (perhaps most important) office interpretations of the law, rules and regulations.

The PTAB, and the Board of Patent Appeals and Interferences before it, have historically not followed office interpretations of the law, rules and regulations. That should change, and it will be better to have a patent office that follows the same law, rules and regulations interpreted in the same way.

These changes are extremely positive and should bring much-needed sanity and structure to the PTAB. ☑

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



Making a Mark With Action

10 QUESTIONS WITH MARY BONEY DENISON,
USPTO COMMISSIONER FOR TRADEMARKS

MARY BONEY DENISON, the commissioner for trademarks at the United States Patent and Trademark Office, is anything but a figurehead. Denison—who has served as commissioner since December 2014 after joining the USPTO in 2011 as deputy commissioner for trademark operations—is a hands-on leader, especially in terms of moving the office toward implementing mandatory electronic filing for trademarks; decluttering the Trademark Register; updating the IT systems; and improving the customer experience.

With trademark applications soaring in our growing world of e-commerce, *Inventors Digest* editor-in-chief Reid Creager posed 10 questions to Denison about her role in this crucial innovative and entrepreneurial arena.

You oversee policy, operations and budget involving trademark examination, registration, and maintenance. What is the most interesting aspect for you? Most challenging?

The most interesting part of my job is the ability to find solutions to problems facing our users. For example, we are about to propose that applicants domiciled outside the United States be required to retain U.S. counsel. This proposal will help to address a significant influx of foreign trademark applications with questionable statements of use and specimens.

Requiring U.S. counsel will hopefully lead to better specimens and more accurate statements of use from foreign applicants. This will ultimately lead to less time being spent by our examining attorneys on foreign filings.

In addition, we are very concerned about the rise in counterfeit goods in the marketplace. Therefore, we have decided to launch a multi-year nationwide

anti-counterfeiting campaign to reduce U.S. demand for counterfeit goods. The first step in that campaign is an anti-counterfeiting video contest, with entries due November 16 (and mentioned in the October *Inventors Digest*, as well as on the ID website).

The most challenging parts of my job are addressing the significant growth in filings and modernizing our IT.

What is the question that you are most often asked?

“When are you next hiring?” The answer is, we will be announcing more vacancies for the Spring 2019 hires this fall. Our advertisements are found at usajobs.gov. We expect to hire more than 100 examining attorneys in Fiscal Year 2019.

Besides that question, people want to know why we are moving to mandatory electronic filing when we already have 99.9 percent of applications coming in electronically.

That is because only 88 percent of applicants are staying electronic through the whole process, and that causes problems with quality and costs us money. All paper and facsimile submissions to the office are scanned by an optical character reader (OCR). Use of an OCR leads to typos—which, unfortunately, we may not always catch.

Further, the fees we charge for paper filings are not sufficient to cover our costs, which ultimately means that e-filers are subsidizing paper filers.

Why are trademarks so important to our worldwide economy?

Innovation has been and remains critical to the development of our country and the world. What sometimes does not get as much attention is how important brands have been and continue to be to



Mary Boney Denison testifies before the House Judiciary Subcommittee on Courts, Intellectual Property and the Internet.

the economy. Every business has a trademark; not every business has a patent.

One obvious example of the value of a trademark is the Apple brand, the most valuable mark in the world—valued in 2017 by Interbrand at \$184 billion. When you think about Steve Jobs and his company's innovations, you can't think about those products without thinking of the brands associated with them.

People buy Apple products because they find those products to be innovative, beautiful and reliable—but also because they are Apple products. Apple's success is all wrapped up in its branding. People know and recognize the Apple brand, and that is critical to the company's success.

Much was written (and celebrated!) regarding the 10 millionth patent this year. How many registered U.S. trademarks are there, and is the ratio of them increasing in the same way that patents are?

The USPTO has issued more than 5.5 million registrations since it issued its first registration in 1870. We currently have some 2.4 million live trademark registrations in our database.

In recent years, trademark applications have skyrocketed. In Fiscal Year 2017, we had a growth of 12 percent in applications and in Fiscal Year 2018 we anticipate growth to be in the 7.5 percent range. Our forecasts show continued filing increases for the Fiscal Years 2019 and 2020 as well.

Patent filings and trademark filings do not generally track one another. Patent filings increased .3 percent in Fiscal Year 2017 and are expected to increase approximately 1.9 percent for Fiscal Year 2018.

Is trademark infringement as highly contested as patent infringement these days, at least in terms of a rise in these claims?

With regard to the Trademark Trial and Appeal Board, new filings of TTAB trial cases (oppositions and cancellations) have been increasing at a rate higher than appeals from examining attorney refusals. Also, motion practice has recently increased some in TTAB trials, so one might say there is more "contesting" going on in the pleading and discovery areas.

But the question whether these trial cases are highly contested end-to-end is debatable. The increase in motion practice is probably a function of more cases being commenced, not more motion practice in a relatively static number of cases that ultimately need to be decided on the merits.

Tell us about the recent project with the European Union that seeks to reduce the growing number of misleading/fraudulent trademark solicitations.

For many years, our users have been receiving misleading/fraudulent solicitations bearing names that frequently are highly similar to the U.S. Patent and Trademark Office. We have taken a number of steps to combat these solicitations.

First, we are educating the public by letting them know about the problem in office communications (e.g. filing receipts, office action cover, letters accompanying registrations) and on our website.

Second, we have teamed with the Department of Justice to pursue criminal prosecutions of those sending out the solicitations. Last year, several people were convicted or pled guilty to crimes relating to misleading/fraudulent solicitations. Two USPTO

Mary Boney Denison
has a one-on-one
meeting in her office
at the USPTO.



lawyers are working full time at the DOJ on this project, and more indictments are expected.

Third, we are participating in a U.S. government inter-agency mass mailing fraud group to better coordinate our pursuit of these criminals. Finally, the five largest trademark offices in the world participate in a group known as the TM5. Last year, the USPTO proposed a TM5 project on misleading/fraudulent solicitations, which is being co-led with the EUIPO. We are using this project as a way to facilitate exchange of information on this challenging global problem.

Why have fraudulent applications become such a problem in the online retail industry?

We are not sure, but we think the existence of Amazon's brand registry, while encouraging trademark registrations, also may be one reason we are getting fraudulent filings.

In your opinion, what is the most important recent trademark case?

The Supreme Court is currently considering whether to grant certiorari (a process for seeking judicial review and a writ issued by a court that agrees to review) to the case known as *In re Brunetti*. The Court of Appeals for the Federal Circuit struck down the more than century-old statutory bar on registration of scandalous or immoral marks, reasoning that the provision is a content-based restriction on speech that violates the First Amendment. Content-based restrictions on registration are a longstanding feature of federal trademark law, and we don't think that the First Amendment requires the USPTO to register vulgar terms.

I am very concerned about the kinds of marks our examining attorneys will have to examine and the arguments we may see about the constitutionality of other registration provisions that have never been viewed as constitutionally suspect if the decision stands. After the decision in *In re Tam*, the majority of our examining attorneys voted to remove their names from all registration certificates. I hope that the Supreme Court grants the petition for certiorari we recently filed.



Please tell readers about the trademark graveyard, and how it relates to the importance of keeping a current trademark registration for a brand or product.

Sometimes, marks are not protected by their owners against use by unauthorized third parties. If a mark is so popular that the public starts to use it as a generic term for a good or service and the owner does not protect against such use, the mark can lose its trademark status and can become a "generic" term which anyone is entitled to use.

U.S. courts have found the following terms that were once trademarks to be generic: cellophane, dry ice, raisin bran, escalator and zipper. To avoid having your trademark die and find itself in the "trademark graveyard," it is important to ensure that a mark is used as an adjective, not as a noun or a verb. You never want your mark to be the product descriptor.

So, for example, "cellophane cellulose sheets" would have been an appropriate use of cellophane as a trademark.

If you hadn't chosen this career, which other one would you have chosen and why?

I would have chosen something design related. I come from a family of architects and have always been interested in design, including jewelry design, interior design and art. I studied at L'Ecole du Louvre (the college associated with the Louvre Museum in Paris) during my junior year in college and loved it.

My husband and I are building a house, and I have really enjoyed all of the selection processes for the interiors. Interestingly, the interest in design continues in the next generation, as my son is in the process of getting a PhD in art history. 🏠

MARY BONEY DENISON

Title: Commissioner for trademarks, United States Patent and Trademark Office.

Experience: Trademark prosecution and litigation as a partner at Graham & James LLP, and as a founding partner at Manelli Denison & Selter PLLC.

Organizations: Served three years as a member of the Board of Directors of the International Trademark Association, as well as on the USPTO's Trademark Public Advisory Committee.

Education: Degrees from Duke University and the University of North Carolina School of Law, the latter where she received the UNC School of Law Distinguished Alumni Award in 2016.



Trending Up

MILLENNIALS' IMPACT ON INVENTION OPPORTUNITIES JUST BEGINNING TO TAKE OFF **BY JOHN G. RAU**

INVENTION TRENDS are constantly changing, and the smart inventors frequently research where the opportunities and needs are.

Products associated with smartphone apps and eco-friendly goods are especially in demand. Many invention services companies advertise the types of product inventions they see as having great possibilities.

Lambert & Lambert (lambertinvent.com/inventions), a Minneapolis-based company, is looking for inventions in categories that include: ATV, motorcycle and power sports; automotive accessories, aftermarket and motor equipment; consumer electronics; hardware and tools; household goods and housewares; juvenile and baby products; lawn and garden products; medical and dental products; pet products; plumbing and HVAC products; safety products; sports, golf, recreation, camping, and fishing and hunting products. Edison Nation (edisonnation.com) is looking for kitchen gadgets, products for infants, fitness products and As Seen On TV products. Clearly, the invention opportunities are there.

So, who's going to invent all of this stuff?

Inventor trends

The process of inventing and launching products has changed due to the increased innovation associated with digital technologies, along with the fact that demographic characteristics of the inventor

community are changing. For example, as a time reference point, in 2006 Tamara Monosoff wrote an *Entrepreneur* magazine piece that discussed evolving trends involving inventors. Her conclusions:

- Inventors are becoming more diverse, including more kids, moms and seniors.
- Inventors are becoming more visible, as evidenced by the many TV shows and other forms of media dealing with the subject of inventing.
- Inventors' mind-sets are changing in terms of pursuing more aggressively the commercialization of their invention.
- Companies are realizing the possibilities of working with inventors.

So are these observations from 12 years ago still valid, or have they changed?

Let's start by looking at the demographics of population trends. According to the U.S. Census Bureau and other projections, the Millennial Generation, referred to as the "Millennials" or Generation Y (born in the 1980s to mid-1990s), will soon be the largest living adult generation in the U.S., surpassing baby boomers (1946-64). Of the four generations in the workforce today, they are the largest: about 40 million people employed.

According to *Time* magazine, by 2025, 3 of 4 workers globally will be millennials. They most likely represent the "face" of a significant population of current inventors and will be the dominant source of inventors for many years.



The typical consumer benefits from one or more of the digital communities that have been created by Millennials.

Positive characteristics

Given these evolving demographics, who among these people are potential inventors?

Much has been written about the characteristics and demographics of this group. Their views and general approach to life are radically different from that of previous generations. From an inventor's perspective, their numerous attributes:

- They are optimistic.
- They are notorious for multi-tasking.
- They understand the digital communications world, having been brought up in it.
- They are the most inclusive generation, preferring to work in a diverse group with different opinions.
- They are action oriented.
- They are a natural at networking and figuring out ways they can make a difference.
- They have a strong desire for achievement and promotion.
- They are entrepreneurial. According to the Kauffman Foundation, 54 percent either want to start a business or have started one.
- They are the most educated generation in American history; more than 63 percent have a Bachelor's degree, according to Yahoo! Small Business.

The typical consumer benefits from one or more of the digital communities that have been created by Millennials. These include the social networking service Facebook; Instagram, the photo and video-sharing social networking service; and Tumblr, a

microblogging and social networking website that allows users to post multimedia and other content to a short-form blog.

What's next is coming fast

In her 2016 article "Millennial Inventions: What Will They Think of Next?" (sheboom.com), Bridget Brindley cites other invention areas in which Millennials have been involved: wearable devices to reduce the risk and improve safety of workers; a power-generating shoe insole for charging portable electronics such as cell phones, music players or GPS devices; an anti-cavity gum that can be used in austere environments to reduce plaque and tooth decay; a cellular relay station for use in rural areas to set up a local communications network system.

These developments all coincide with Tamara Monosoff's observations 12 years ago relative to trends involving inventors. We are seeing a "new breed of cat" in the inventor world—the Millennials. They should heed the sage advice of Abraham Lincoln: "Whatever you are, be a good one." 📦

John G. Rau, president/CEO of Ultra-Research Inc., has more than 25 years' experience conducting market research for ideas, inventions and other forms of intellectual property. He can be reached at (714) 281-0150 or ultraresch@cs.com.





Following the Money Reveals Positive Signs

TRENDS SHOW MORE LIQUIDITY FOR ENFORCING GOOD PATENTS

BY LOUIS CARBONNEAU

CURIUS as to whether the IP market is trending up or down? You can use vector-based analysis on a series of indicators, or you can follow the money.

One may ask, “Is the flow of money coming in, directly or indirectly, to make acquiring and asserting enforceable patents easier?” On these two counts, the trends are definitely positive.

First, Tangible IP’s status as one of the leading brokerage firms internationally gives it a clear vantage point. We are regularly contacted by new buyers who were not even in this market a year ago. Those newcomers have specific needs and are ready to pay cash for the right assets. That’s right: cash!

Others are former veterans of established publicly traded IP companies (PIPCOs) who are re-inventing themselves under new entities and without the shackles of legacy. Either way, most are now non-practicing entities or NPEs (a person or company who holds a patent for a product or process but with no intention of developing it), which makes the willingness to pay a cash component all the more refreshing—and points to a risk analysis that is more optimistic than in years past.

Another interesting and no less important development is the increasing ease with which one can obtain financing for a patent assertion campaign (and at much better terms than the previous number of years).

Historically, litigation-backed financing firms have required a 2X-3X multiple for every dollar invested in a campaign, with the first dollars of revenue returning to the financier. In addition to the previous, many times they also received an additional coupon (interest) on any recoveries above and beyond their already very generous return. Those days seem to be mostly gone, with the arrival of several smaller entities flush with cash that are willing to finance the right cases at a much lower cost to the borrowers (which may be either the patent owners or the law firms representing them).

Actually, this has become quite a cottage industry, to a point where 175 people congregated in New York City in mid-September in what was the first iteration of the Litigation Finance Dealmakers Forum.

In a sense, the latter phenomenon explains the former. If you can secure financing at much lower rates, you can afford to pay inventors and other patent owners upfront or through some hybrid deal structure that is not exclusively back-ended, as was the case in the past 3-5 years.

For me, these metrics suggest there is significantly more liquidity out there to enforce good patents. This should convince infringers that the “scorched earth” approach may not be as effective moving forward if the other side is still standing strong after a long battle. In my view, any factor that will bring people to the table and accelerate the transactability of this asset class should be welcome.

Patent soul-searching

A couple of months ago, I wrote a philosophical piece called “the Soul of Patents” that generated quite a few comments (mostly positive). I noted that innovation, if left unchecked, can become a source of evil or abuse. One example of this is an Amazon patent describing how to put workers in cages over robots.

Well, you will be relieved to read that an Amazon executive recently admitted that putting employees in cages upright all day long while they are being driven by robots was “a bad idea” after all.

On the other hand, one can only cringe at seeing that Purdue, the pharmaceutical company responsible for flooding the United States with the highly addictive painkiller OxyContin, has now patented a new drug to treat opioid addiction. Really?

For most people, this will be another good reason to look at alternative treatments for pain management. The leading one is cannabis. Which brings us



New buyers who were not even in this market a year ago have specific needs and are ready to pay cash for the right assets.

to this interesting question: Should pot be patented? With the rise of cannabis (both medical and recreational) as a multibillion dollar industry, there is a now a race to the patent office and it appears the pot patent war has already started.

Buyers and sellers

Historically, patent transactions that are successfully brokered take place in either the first or fourth quarter of the year. Nothing like the end of the year to act as a forcing function before the budgeted dollars turn into pumpkins. Use them or lose them, right?

In many cases, a signed agreement is sufficient to book the expense in a given year even if the actual closing happens in January. Accordingly, Q2 is often a soft quarter—and this year was no exception in the industry, with *IAM* magazine reporting that the number of transactions in that quarter was the lowest in two years. Among the top buyers was **Longitude Licensing**, which was acquired by Vector Capital in 2016. **RPX** led in the number of deals, acquiring 101 assets in five separate transactions.

Top sellers were **Intellectual Ventures** and **Panasonic**. No surprise there, as this continues an established trend. More surprisingly, companies such as **GE** and **Shell** are now making assets available for sale, and **Google** reported its first sale on the secondary market, unloading lithium battery assets it acquired from Motorola in 2012.

Winners and losers

It was another successful day in court for **Finjan**, which seems to have found the winning formula among many beleaguered NPEs. **Parker Vision** announced that the United States Court of Appeals for the Federal Circuit issued its decision affirming the lower-court Patent Trial and Appeal Board's 2017 ruling that certain method claims of Parker Vision were not proven by **Qualcomm** to be unpatentable. This sets up the company for a much stronger case during the next chapter in court. On the other end of the spectrum, shareholders of **Walker Innovation** (a subsidiary of NPE Walker Digital) approved the liquidation and dissolution of the company. ...

We often talk about the parties doing the deal but rarely about those supporting them. A recent study showed that the market for IP service providers is vibrant and some of these companies are fetching, in some cases, unicorn-like valuations.

Just last year, **CPA Global** (which had only \$12 million in sales in 2015 and no profit) was sold to private equity firm **Leonard Green & Partners** for more than \$3.1 billion! No wonder these firms are multiplying. And with the advances in AI in patent analytics, these providers should be able to operate with a much smaller workforce than in the past. ...

Hits to the helmet are no longer allowed on the field in the NFL, but they still are in court—as **Riddell** found after it unsuccessfully tried to invalidate a rival's helmet design patent. ...



I'LL SEE YOU IN COURT

The PTAB is still the forum of choice for those on the receiving end of a patent assertion lawsuit, and inter partes review petitions are still filed in large volume. The latest included petitions against two NPEs controlled by **Fortress Investment Group, INVT SPE** and **Uniloc**. ...

IP Edge (through subsidiary Comtech), launched a new litigation campaign against **Black, Dialogic, Digi International, Synaptics** and **Westermo Data** over enterprise-grade networking and/or communications products. These patents were acquired from **Panasonic**. Therefore, anyone who says there is a fundamental distinction between operating companies and NPEs when it comes to monetizing patents should pause and reflect on the fact that most Fortune 500 companies have resorted to this "privateering" model in years past. In that regard, the recent lawsuit from **Facebook** against **Blackberry** is even more interesting as it is reported that Facebook acquired five of the six patents it is now asserting from various third parties, and it is doubtful that it is practicing those itself. Certain people have asked whether this makes Facebook a patent troll. ...

There was also some unusual activity in the semi-conductor space, when **Seoul Semiconductor** filed an infringement lawsuit against retailer chain **Fry's Electronics**. ... We also saw a flurry of new suits filed around medical devices, drones and wireless services.

On a more serious note and another blow to basic medical research, the federal circuit ruled that **Acorda's** patent for a multiple sclerosis treatment was invalid. Although we all understand the role played by generic drugs to bring costs down over time, how can there be generics if there is no original patented drug left to copy?

Handshakes

Monkey Media reported having licensed its video family of patents to **Samsung**. Sadly, this came after a protracted legal battle. **RPX Corp.**, the defensive

aggregator now owned by private equity firm HGGC, said it has completed a patent licensing agreement with **Realtime Data LLC** for an undisclosed sum.

From the bench

There have been no major decisions that may affect IP market trends. We are still seeing many decisions from the PTAB invalidating patents that are being overturned by the federal circuit. But we are still getting a few head-scratching decisions that perpetuate the ambiguity as to what exactly is patentable subject matter.

On the legislative front

The much maligned PTAB was in the hot seat again when a study by law firm **Robins Kaplan** revealed that large technology companies file a high percentage of duplicative IPRs against the same patent owners, in what looks like a war of attrition strategy. The study exposed **Microsoft** as the top abuser, with 59 percent of its IPRs found to be duplicative. **Apple** was second with 56 percent, followed by **Samsung** (38 percent), **Google** (38 percent) and **LG** (34 percent).

Putting a limit of one IPR per patent seems like an easy and logical fix. New rules are needed at the PTAB to help restore some faith in the system. They should have been included in the latest set of United States Patent and Trademark Office/PTAB Standard Operating Procedures that was released in September. ☐

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.



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PART 1 OF 2

My Kind of Boot Camp

INNOVATION EXCHANGE PROGRAM
YIELDS A TRIP TO SANTO DOMINGO **BY JEREMY LOSAW**

THIS PAST SUMMER was a noteworthy one for the Dominican Republic. One of its own, Vladimir Guerrero, was inducted into the Baseball Hall of Fame in Cooperstown, N.Y. A few people from the small island nation even traveled to witness the induction firsthand.

As Guerrero was giving his induction speech, I was headed to Santo Domingo for my first trip to the island—having been chosen to complete a project for the Young Leaders of the Americas Initiative. I collaborated with my Dominican friend Emil Rodriguez and Eric Gorman, owner/designer at Wily LLC in Charlotte, to run an innovation boot camp for Dominican college students.

The YLAI is a U.S. State Department effort to grow relationships between firms in America and Central and South America. Funded by the Department of State's Bureau of Educational and Cultural Affairs, it sponsors 250 young leaders from outside the States to spend five weeks in the U.S. each fall.

In 2016, Enventys Partners was fortunate to host YLAI fellow Rodriguez, whose firm, Xolutronic, is an electrical product development company based in Santo Domingo. The YLAI program also provides funding for U.S. hosts to do a 10-14 day "reverse exchange" to share their expertise in the fellow's home country, so when the call for applications came this spring, I was excited to submit a proposal.

Getting extra help

Because Emil and I are both passionate about sharing our product development experience, we built our application around hosting a product development boot camp in his hometown. In mid-June, we received approval to hold our boot camp at the end of July.

I was excited by the news—and overwhelmed. I had just four weeks to pull together materials for the boot camp, get my travel plans sorted out, and make sure things would be covered at work and at home.

Emil and I collaborated nearly daily to make sure we had engaging content for the boot camp and that

we had the logistics worked out. He found us a room at the INTEC University in Santo Domingo and set up a website and flyer to send out to potential participants. In the meantime, I worked on creating content for the program.

Although Emil and I understand the industrial design and engineering aspects of product development, we wanted to bring in a design guru to help teach strategy. I called my designer friend at Wily and pitched him the idea. We had met a few times at local design events but hadn't found a project to work on together, so it was a bit of a shot in the dark. Fortunately, he was excited about the program and agreed to help.

By mid-July, we were ready. In just the few weeks that sign-ups were open, we had 25 students register for the class. We decided we would offer the following challenge to them: Design a way to make it easier to grow plants indoors. (As a plant lover, this was strongly influenced by my own tastes.)

Emil ordered a bunch of supplies; Eric and I filled our checked luggage with electronics, sensors, 3D printer filament and our bathing suits. The logistics were settled, but getting there would prove not so straightforward.

Sudden hurdle overcome

In the first hour of my journey, I thought it may be over entirely. When I arrived at the gate, my connecting flight to Santo Domingo was canceled and the only way to get to the D.R. that day was to fly to Punta Cana instead. Fortunately, Punta Cana is a relatively easy two-hour drive from Santo Domingo—and not the worst place on Earth if you have to get rerouted. Emil agreed to drive the extra hours to pick me up there. The day was saved.

After a delicious lunch of shrimp on the beach, we headed back to the city where we did some factory tours.

We stopped at printed circuit board manufacturing facility Precision Engineering Inc., where Emil

used to manufacture many of his products, including his password security product the Passport. We also visited the Drone Innovation Center (Centro de Innovacion de Drones), and an augmented reality class. We toured Creative Lighting Solutions, an injection molding facility that manufactures lighting products for the automotive industry.

It was a long day. After many hours stuck in traffic and reading billboards for Brugal, Maluma, Popular, and other brands I had never heard of, I was ready for some rest.

Emil got us some burgers and Presidente beers served “ropia esposa” style (frosty and with a dress made of napkins), and it was time for bed.

Touring and planning

The next day we prepared for the boot camp, but not before a quick hit of tourism. Emil took me to the colonial zone, home to the city’s old fortress and buildings. We toured a few museums and boned up on some history of the D.R.

Then it was off to the U.S. Embassy. The 2018 YLAI fellows were having a kickoff meeting for their impending trips, and Emil and I offered our insights about the experience and American culture.

On the way to dinner we stopped at Pyhex co-working space, where we met founder Rudy Ganna and saw a number of Dominican start-ups hard at work. Finally we stopped at the Xolutronic office, where I got to see Emil’s office and meet his team that I had, up to that point, only worked with virtually.

As night fell over the city, the workday was done and I joined some of the guys outside to share a few jumbo bottles of Presidente. They told me about Dominican culture, food, and of course mamajuana (rum aged in spices and wood chips.)

Just days before, I knew practically nothing about the D.R. Now I had quickly seen how its people are so industrious, innovative and kind. I was championing at the bit to get started with our boot camp—but first, we had to pick up Eric in Punta Cana and get a bit more R & R. ☺

The Young Leaders of the Americas Initiative is a U.S. State Department effort to grow relationships between firms in America and Central and South America.



From left, Emil Rodriguez, Jeremy Losaw and Eric Gorman collaborated to run an innovation boot camp for Dominican college students.





'Stairway to Heaven' Case to Get New Trial

APPEALS COURT VACATES PART OF 2016 JUDGMENT
IN PLAGIARISM CLAIM **BY STEVE BRACHMANN**

THE UNITED STATES Court of Appeals for the Ninth Circuit has ordered a new trial in *Skidmore v. Led Zeppelin*, vacating in part a judgment out of the Central District of California that Led Zeppelin's classic rock song "Stairway to Heaven" was not substantially similar to "Taurus." That song was written by the late songwriter Randy Wolfe, a member of the band Spirit.

The case was remanded back to the district court on September 28 after a three-judge panel in the appellate court ruled unanimously that certain instructions given by the district court to the jury were erroneous and prejudicial.

The appeal to the Ninth Circuit was filed in March 2017 by Michael Skidmore, the trustee for the Randy Craig Wolfe Trust. The action was in part to challenge the district court's jury instructions and the court's alleged failure to instruct the jury that the selection and arrangement of musical elements, which may be unprotectable individually, can be protectable under U.S. copyright law.

The Ninth Circuit's opinion noted that the appellate court was concerned with the extrinsic test for

determining substantial similarity between the works, adding that such a test could be difficult to administer.

Opening riff challenged

The original suit, filed in 2015, claims that Led Zeppelin's Robert Plant and Jimmy Page lifted the song's iconic opening riff from Spirit's 1969 instrumental "Taurus" after hearing the band perform. Plant said in testimony in June 2016 that he does not remember hearing Spirit perform. Page said he had not even heard "Taurus" until 2014.

A Los Angeles jury determined in 2016 that the song was not plagiarized. Page and Plant issued a joint statement that the two songs were not "substantially similar."

Plant said he doesn't remember watching Spirit play in Birmingham in 1970 because that night he was involved in a serious car crash with his wife, who suffered a fractured skull.

"Part of the windshield buried in the top of my head, which was interesting," he said during the 2016 trial. "I don't remember a thing. I don't have a recollection of mostly anyone I've met."

From left, Led Zeppelin's John Paul Jones, Robert Plant, Jimmy Page and John Bonham pose in a vintage Michael Ochs photo.



The original suit claims that Led Zeppelin's Robert Plant and Jimmy Page lifted the song's iconic opening riff from Spirit's 1969 instrumental "Taurus" after hearing the band perform.



2 key errors cited

The Ninth Circuit also determined that the district court erred in its formulation of the jury instructions regarding originality in two aspects. First, one of the jury instructions included language that common musical elements such as descending chromatic scales, arpeggios or short sequences of three notes aren't protectable by copyright.

"This error was not harmless as it undercut testimony by Skidmore's expert that Led Zeppelin copied a chromatic scale that had been used in an original manner," the Ninth Circuit's opinion reads.

Second, a different jury instruction omitted parts of the test for originality and added misleading language. The district court had omitted an instruction requested by Skidmore which would have acknowledged the fact that the original part of a work doesn't need to be new or novel so long as it isn't copied.

Not only did the district court omit that part of the instruction, it also included language regarding elements of prior works or the public domain not being copyrightable.

"While this statement is not literally incorrect, it misleadingly suggests that public domain elements such as basic musical structures are not copyrightable even when they are arranged or modified in a creative, original way," the Ninth Circuit decided.

Elsewhere in the appeal, the Ninth Circuit didn't side with Skidmore regarding the scope of the deposit copy of "Taurus," the sheet music for the song deposited with the Copyright Office when registering the copyright. Skidmore had argued that the sound recording was included in the scope of the deposit copy, but the Ninth Circuit held otherwise.

Jury didn't hear 'Taurus'

The Ninth Circuit did, however, determine that the district court abused its discretion in preventing the jury from hearing a sound recording of "Taurus" in order to assess whether Led Zeppelin band members Jimmy Page and Robert Plant had access to the recording.

Steven Weinberg, a copyright lawyer who watched the trial, told The Guardian that the sheet music for

Taurus wasn't faithful to the recording, so jurors could not fairly compare the songs.

Weinberg said a new jury will now get to hear a recording of "Taurus" and said: "I believe that ruling alone has the potential of changing the outcome at the next trial, because the jury will finally get to compare 'apples to apples.'"

J. Michael Keyes, intellectual property attorney and partner at Dorsey & Whitney, offered these comments regarding the Ninth Circuit's decision in this appeal:

"One of the key issues in the case was whether the descending baseline—a short chromatic series of notes—was sufficiently original and thus protected by copyright. The trial court instructed the jury that 'common musical elements, such as descending chromatic scales, arpeggios or short sequences of three notes' are not protected by copyright. The appellate court found this key jury instruction erroneous and, along with other errors, required a retrial.

What are the implications here? First, very little originality is necessary for music copyright protection in the Ninth Circuit. Common musical elements—the building blocks of any composition—could be considered sufficiently original so long as they are combined with other elements.

"Second, as a result, the decision could readily lead to more lawsuits and claims over the barest of musical similarities between two pieces. I'm not sure that's good for musicians or the music industry.

"Third, on a broader level, the decision arguably overlooks the rich history of music where certain compositional elements are used and recycled and reused again to create new works. That's what makes our music traditions and heritage so vibrant. I fear that copyright lawsuits over trivial similarities could squelch musical creativity." 📢

The March 2017 appeal on behalf of Spirit resulted in the Ninth Circuit's finding that a district court erred in aspects of jury instructions. The district court also did not allow jury members to hear a sound recording of "Taurus," the song claimed to have been plagiarized.

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



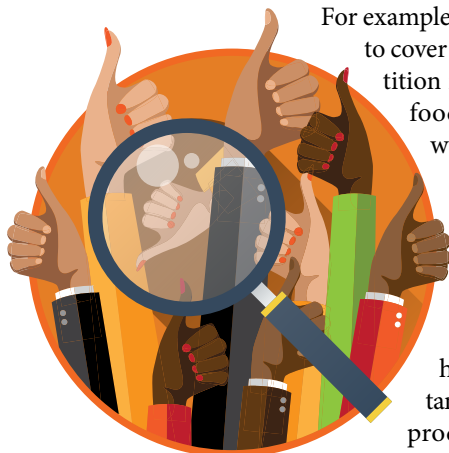
Using Competition for Market Research

LOOK FOR UNHAPPY USERS OF PRODUCTS TRYING TO SATISFY THE SAME NEED **BY DON DEBELAK**

WHEN YOU CONCEIVE an invention, often you can fine-tune your product concept by doing market research with competitive products. You can find out whether your idea addresses a need that is important to people, what potential customers look for in products they buy to meet that need, and what type of price people will pay for your type of product. When doing this research, keep these questions in mind:

What is the competition? Inventors often tell me there is no other product on the market like theirs—which may be true. But look at competition instead as any product that seeks to satisfy the same need.

For example, if you have a new flexible product to cover items in the microwave, the competition is any other product that prevents food from splattering. Competition would include using nothing at all, using a napkin, using a silicon cover, or putting food in a microwavable container.



Are you solving an important customer need? Invention success happens when you solve an important customer need with an innovative product. No matter how innovative, most inventions fail when they don't address a key customer need. You can tell how important the need is by asking people to look at how they are addressing the need your idea targets.

In the example of the new flexible product for covering food in the microwave, you can simply show the competitive products and ask which product, if any, they have used and are using now. If people have tried several products or are using an expensive solution, you have a strong indication that your product is addressing an important need.

Are people happy with the current products? Unhappy users of competitive products are people looking for a new solution. When you ask people what they like or dislike about each product, you can

see if people have more dislikes than likes. If they have more dislikes, that is a very good sign.

But follow up that question with how they would like to see the product improved. You want 40 percent to 50 percent of the people you survey to have comments on how the product could be improved.

How can your product can be improved? You can learn a great deal about how to improve your product by hearing what people like and don't like about competitive products. Inventors tend to have one view of how to design their product. But when potential users tell you their likes and dislikes about a product, important consumer features inventors did not think of will often emerge. You might learn which features to add, and which features you might want to delete.

What price might consumers pay? When you show a range of competitive products, you will see what percentage of people do nothing to solve the problem—and for those who try to solve the problem, the prices they are paying. You don't need to have every consumer want to pay a high price, but at least 20 percent of potential customers should be willing to pay the higher price you expect to charge.

How many people to interview? Typically, seven to 10 potential users will be enough to give you a good idea of how your product will be received.

Who to interview? Since you are showing competitive products and not your own product, you can use family, friends, co-workers and other acquaintances. Be careful to ask open-ended questions without steering the person you are interviewing, and listen to the responses without judgment. 🗨️

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.



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IoT Corner

Semiconductor company **Silicon Labs** announced its new XPress series of development boards to facilitate creating connected devices. The XPress line, with Bluetooth and Wifi versions, promises to help developers focus on developing their product without having to spend time working on the code to drive wireless protocols.

The devices feature over-the-air updates and are driven by Silicon Labs' Gecko operating system. Both can be monitored and configured via smartphone apps and can be monitored via USB cable on a PC. The wireless modules are also FCC pre-certified and can be seamlessly integrated into a custom PCB.

Development kits are available through major electronics supply houses for \$29-40. —Jeremy Losaw



Wunderkinds

When the 2010 BP oil spill occurred, **Keiana Cavé** of New Orleans wondered whether hidden environmental damage might result. At 15, she began research to prove that theory and eventually discovered that when UV rays from the sun mixed with the oil on the ocean's surface, the result was carcinogenic. Now a college junior, Keiana has published two research papers and holds two patents for methods of detecting toxins in ocean water. She aims to create a new dispersant to neutralize the cancer-causing chemicals. Her research received \$1.2 million in funding from Chevron.



What IS that?

OK, you can either view this as the latest invasion of privacy or something with a strong cool factor. We vote for the latter. It's a **glass doorknob**, created by architect Hideyuki Nakayama, that reflects a fish-eye view of the room that is on the other side of the door. The knob was displayed at the DesignTide Tokyo exhibition in 2016.

30%

The estimated **spike in trademark applications** between 2016 and 2017 identified by the UK Intellectual Property Office, in a report released in July. Financial uncertainty over Brexit is a possible explanation.



WHAT DO YOU KNOW?

- 1** Who invented Kevlar, the main ingredient in the production of bulletproof vests?
A) Stephanie Kwolek **B)** George Washington Carver
C) Lizzie Magie **D)** Lewis Howard Latimer

- 2** In which decade was superglue invented—1940s, 1950s, or 1960s?

- 3** **True or false:** The main difference between a trademark and a copyright involves the kinds of assets they protect.

- 4** As reported in this issue, the plagiarism case against Led Zeppelin is headed back to court. Which former Beatle was ruled in 1976 to have plagiarized a song?

- A)** Paul McCartney **B)** John Lennon
C) George Harrison **D)** Ringo Starr

- 5** **True or false:** Thomas Edison tried to mine gold in California.

ANSWERS: 1. A. 2. Also known as cyanoacrylate, superglue was originally discovered in 1942 by Dr. Harry Coover and his team at Eastman Kodak. 3. True. A copyright is usually associated with literary and artistic works (books and videos). A trademark protects items associated with branding, such as its logo. 4. C. A judge ruled that in Harrison's 1970 chart-topper "My Sweet Lord," he "subconsciously" plagiarized the 1963 Chiffons hit "He's So Fine." 5. False. Edison went to New Mexico in 1898 to try to mine gold but gave up after more than a year.

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