# Happy 225<sup>th</sup> Birthday U.S. Patent System! We celebrate by looking at five fun, new patents Investigating the newest inventions from Google, Disney and more

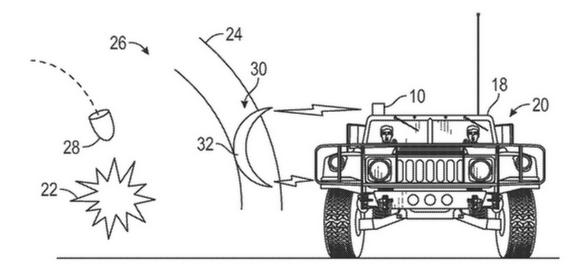
## By John O'Rourke \* This article first appeared in Inside Counsel Magazine on April 1, 2015: <u>http://bitly.com/1HiN5gy</u>

On April 10, 1790, President George Washington signed a bill that laid the foundation of the U.S. Patent system, giving inventors rights to their creations for the first time. And today, even as legislators debate how best to bring about reform, the U.S. patent system continues to prove that it is the greatest engine for innovation the world has ever known. For, despite its many flaws and weaknesses, America's entrepreneurs continue to rely on this time-tested system to protect their intellectual property. We must not forget that it is these inventions that become the products and services that are the life's blood of our nation's businesses. Therefore, judges and politicians must take great care before they take any steps to "improve" America's 225-year-old patent system. To illustrate the important role that inventors play, we present five new patents that are not only really cool, they have the potential of creating jobs and investment opportunities in the future.

# Boeing's Force-Field: (U.S. Patent No. 8,981,261) March 17, 2015

Though it has a long way to go before it will be anything like the shields that protect Captain Kirk and his crew in Star Trek, Boeing has been granted a patent for a rudimentary kind of force-field. This "method and system for shockwave attenuation via electromagnetic arc" would not be able to stop bullets, bombs or shrapnel, but it is hoped that it could at least deflect damaging shockwaves.

The idea is for a sensor to detect an explosion and then calculate the direction of the approaching energy wave. A device then superheats a section of air by using lasers, electricity, or other means. It is hoped that the generated plasma field would then protect whoever is behind it. Turning this idea into a reality will not be easy, but anything that will help protect our troops is worth the effort.

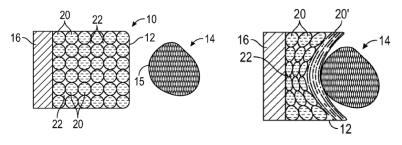


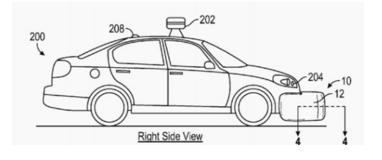
### **Boeing Patent Drawings**

### <u>Google's Better Buggy Bumpers</u>: (U.S. Patent No. 8,985,652) March 24, 2015

Airbags that protect passengers inside a car are nothing new, but Google has patented a bumper that will deploy airbags to protect pedestrians. The abstract states that this is a bumper comprised of a "plurality of air sacs" that will deploy and burst upon impact. It is hoped that this bursting will reduce the bumper's "spring back" that can knock someone onto the pavement, causing a secondary impact.

Google evidently plans to mount this equipment on its driverless cars to provide an extra measure of safety. Another idea presented in the description is for the bumpers to be made of "visco-elastic" material – similar to the polyurethane used for memory foam – to reduce the likelihood of serious injuries caused by a vehicle's impact with a pedestrian.



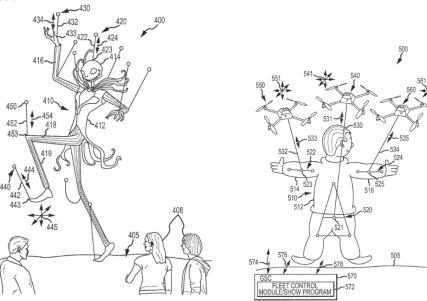


**Google Patent Drawings** 

## <u>Disney's UAV-controlled Marionettes</u> (U.S. Patent No. 8,876,571) November 14, 2014

While many people only see unmanned aerial vehicles (UAVs) as toys used by hobbyists to take videos, or as remote-controlled weapons used by the military, companies like Disney are thinking up new and creative ways to put this technology to use. No, Disney does not intend to use these drones to deliver pizza (like Dominos), or to deliver packages (like Amazon), but rather to deliver entertainment.

Disney has patented an "Aerial Display System with Marionettes Articulated and Supported by Airborne Devices." In other words, this will be a method of using coordinated UAVs to control puppets. And these won't just be *any* puppets, these will be giant marionettes several stories high. If the idea does indeed take flight, it will be interesting to see just how children react. Will they be amazed ... or just terrified?

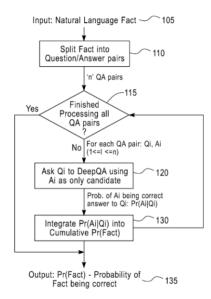


**Disney Patent Drawings** 

IBM's Fact Checker (U.S. Patent No. 8,972,321) March 3, 2015

Did you know this? In 2015, IBM was awarded 7,534 patents, making it America's patent leader and the first company to receive more than 7,000 patents from the USPTO in a single year. Further, IBM has held this top spot *for 22 consecutive years*! This is a fact that has gone largely unnoticed and unappreciated as most tech talk seems to be focused on the innovations of Google, Apple, and Facebook.

And speaking of facts, one of IBM's newest patents is titled "Fact Checking Using and Aiding Probabilistic Question Answering." This is basically an automated truth detector that can assist newspaper publishers and other providers of information – organizations that typically pay dozens of people to manually verify statements. This patent is therefore great news for editors – but maybe it's not such great news for those currently employed as fact checkers.

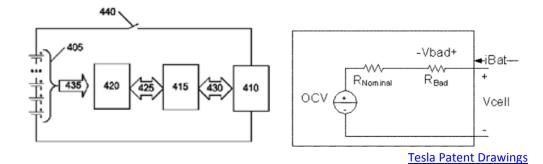


**IBM Patent Drawing** 

# <u>Tesla's Fast Charging Battery</u> (U.S. Patent No. 8,970,182) March 3, 2015

This is just one of the recent patents pertaining to the battery technology that Tesla uses to power its electric vehicles, but what is drawing added attention from the public these days is the announcement that this technology may soon be used in combination with solar panels to power homes and businesses.

In fact, Tesla is already providing batteries to SolarCity (co-founded by Musk's cousins Peter and Lyndon Rive), but Tesla's foray into home energy will likely go into overdrive once its massive Gigafactory in Nevada is completed. It will be interesting to see if CEO Elon Musk's announcement that Tesla will open-source its patents to "good faith use" applies to home energy technology as well.



#### About the Author

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John F. O'Rourke is a registered patent attorney and inventor at WHGC, P.L.C. He has nearly 40 years of overall experience in the applied sciences. He counsels and represents clients in matters concerning technology and intellectual property law. Mr. O'Rourke has prepared several hundred original U.S. patent applications across a broad spectrum of technical disciplines. JohnORourke@WHGCLaw.com