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The Candidates on the Issues ■ **The Battle for Ohio** By Amy Sullivan

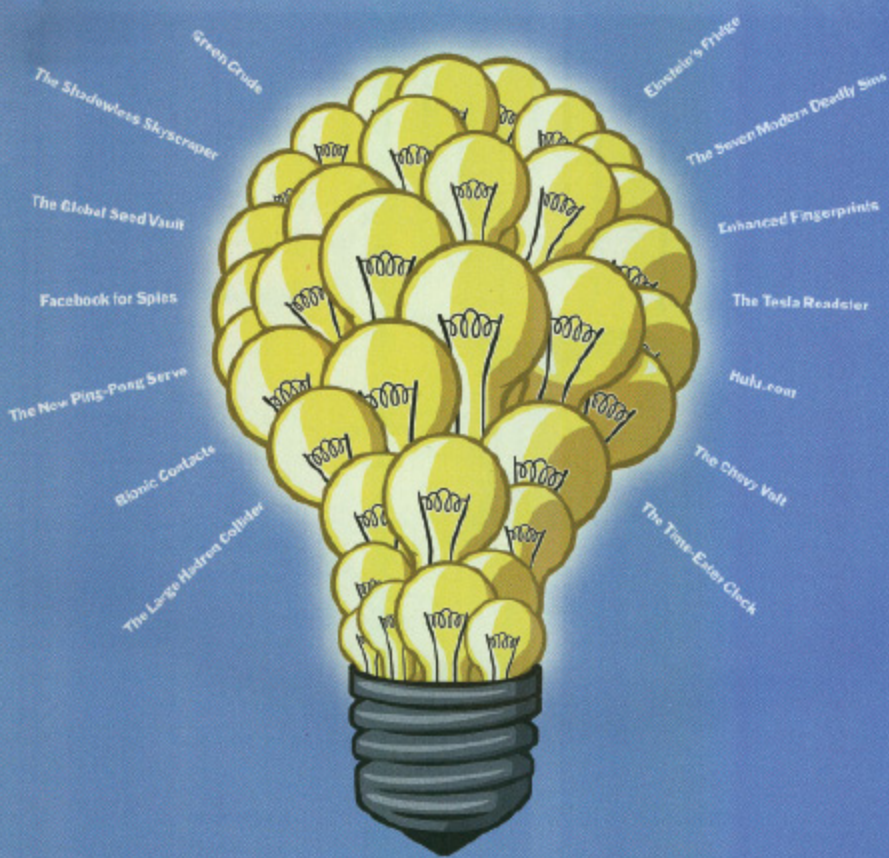
TIME

SPECIAL
ISSUE

The Choice

**Plus: The
Best Inventions
Of the Year**





The 50 Best Inventions Of the Year

Illustrations for TIME by Christoph Niemann



Einstein's Fridge.

31

That Albert Einstein guy had some pretty good ideas—relativity, the photoelectric effect, the “up” hairdo—but his contributions to the field of refrigerator theory have been sadly neglected. No longer. Scientists at Oxford University have resurrected an eco-friendly refrigerator design that Einstein and a collaborator patented in 1930. Instead of cooling the interior of the refrigerator with freon—a serious contributor to global warming—Einstein’s design uses ammonia, butane and water. It also requires very little energy. Though Einstein’s original refrigerator wasn’t all that efficient, the Oxford researchers have tweaked his version and believe it could eventually compete in the marketplace. Then maybe we’ll remember Einstein the way he wanted—as a guy who liked to keep things cool.



Facebook for Spies.

32

Secret agents are people too. They’re just very scary people who know lots of classified information. So don’t they deserve a social network of their own? That’s why in September, the U.S. Government launched A Space, a highly restricted Facebook-style website that’s designed to encourage the sharing of ideas and information among members of the FBI, the CIA, the NSA and the U.S.’s 13 other intelligence services. (If you can name them all, you’re probably already on A-Space.) They still use Facebook to break up with each other like the rest of the world, though.





The Biochemical Energy Harvester.

33

Wasting energy is so 20th century. Power is all around us, if we just know how to use it. That's what motivated Max

Donelan, a kinesiologist at Simon Fraser University, to invent a device that harnesses the energy of walking. The 3.5-lb. (1.6 kg) device wraps around the wearer's knee and generates power using the same principle that allows hybrid cars to recycle energy created by braking. A walker wearing harvesters on both knees could generate about five watts of power—enough to charge 10 cell phones—without hampering his or her stride. Donelan's device is perhaps the most promising in a class of products that harvest energy—all the more important at a time when portable tech, from Blackberries to iPods, is becoming ubiquitous. There's not a watt to waste.



34

Made-in-Transit Packaging.

Most fresh food comes with a "best before" date, but Dutch designer Agata Jaworska thinks it should be marked "ready by." Her concept: packaging in which food can keep growing during shipping to the supermarket so that it arrives ready to be harvested, in a state of optimum freshness.

35

Airborne Wind Power.

As you get higher, the wind gets stronger. Harvesting just 1% of those high-altitude breezes could produce enough power for everyone on Earth. That's what Sky Windpower aims to do. The San Diego company—founded by a scientist who got his start breaking codes during World War II—is designing flying wind turbines that could harness the jet stream. It's the definition of high tech.

36

The New Ping-Pong Serve.

German Olympian Dimitrij Ortcharov's serve isn't about power. It's about weirdness. Crouching to table-level, he peers over his paddle and executes a hand dance before launching the ball at his opponent, who is probably too dumbfounded to respond. Which, of course, is the point.

