

## 7 New Technology Marvels

**The future is now: These Inc. 500|5000 products bring tomorrow's innovations into today.**

By: Calvin Cato

Our Inc. 500|5000 CEOs don't settle for what's already on the market. They seek out new and efficient technologies that make our lives easier. Here are a handful of the gadgets they've been working on:

### **BACTRACK Breathalyzer, KHN Solutions**

Keith Nothacker, CEO of KHN Solutions and head manufacturer of the BACTRACK Breathalyzer, has created a device that gives Alcoholics Anonymous a new meaning. His company-No. 3003 on the Inc. 5000-provides this sleek black breathalyzer can determine the user's alcohol levels without the aid of a mouthpiece and can fit in a pocket or small purse. A quick blow on the sensor activates the breathalyzer, which measures blood alcohol content in seconds. Now there's no excuse for letting friends drive drunk. The breathalyzers are very popular around major holidays (Christmas, Fourth of July) where rates of drunk driving increase. "It's a really great way for a group of people to make sure the designated driver can still drive."

### **Flashlight, 5.11 Tactical**

You'll never be left in the dark with this permanently rechargeable flashlight. Using advanced technology developed at the University of Idaho, the batteries in the device recharge in a minute and are guaranteed to power the light for several continuous hours. These batteries may soon extend the continuous lives of countless electronics. The flashlight is encased in hard carbon fibers, making it resistant to dings, dents and scratches. The product is still a prototype, but will make it to market in early 2009. That should give 5.11 Tactical -No. 1122 on the Inc. 5000- a boost on next year's list.

### **Scout X3, VideoRay**

This undersea explorer weighs only eight pounds and can withstand water pressure at depths of up to 1,000 feet. The Scout X3 has been used to thwart seafaring drug smugglers (by spotting illegal paraphernalia attached on the underside of ships), locate drowning victims and investigate shipwrecks. "The Scout X3 is incredibly safe to use and saves crews thousands of dollars in diving and investigative equipment," says Brian Luzzi, CEO of VideoRay -No. 1662 on the Inc. 5000 list. VideoRay's explorer has been involved in several major projects, including an exploration and imaging of the *USS Arizona*, a Pennsylvania-class battleship sunk at the Battle of Pearl Harbor.

### **ARES Unicorder, Advanced Brain Monitoring**

Used by sleep researchers, this device measures airflow, pulse rate, snoring volume and blood oxygen saturation. It can store up to four nights worth of sleep data and is light enough to be worn comfortably in any sleep position. This device may snuff out several sleep related disorders, including sleep apnea and snoring. Unicorder was funded by a \$4 million research grant from the National Institute of Health and took three and a half years to develop. Advanced Brain Monitoring is No. 4222 on this year's Inc. 5000 list.

### **Transparent Armor, American Defense Systems, Inc**

Originally manufactured for prisons, ADSI's transparent glass armor has recently been incorporated in vehicles deployed in Iraq. After a contract with the Department of Defense, the company retooled and strengthened the armor, making it more lightweight and resistant to ballistics and mid-scale blasts. ADSI -No. 696 on the Inc. 5000 list-can outfit vehicles in as little time as 50 days and its armor solutions can be customized to fit various vehicles: from large forklifts to off-road Jeeps. Ward plans to see continued sales increases in the next five years. The technology may soon be used on pedestrian vehicles.

### **nVisor ST, NVIS**

This head-mounted virtual display is used for military training applications, high-end entertainment, and scientific research. It boasts a high resolution and weighs about two pounds. The visor's production takes 12 to 18 months and is used by many cutting edge companies and government agencies including Disney, Lockheed Martin, and NASA. CEO Mark Foglia came up with the innovative technology in 2002 while noticing a change in projection displays. "We noticed a switch from using cathode ray tubes to space-saving

light emitting diodes." The device is used by many notable companies and government agencies including Disney, Lockheed Martin, and NASA. "We're constantly evolving the product every year," says Foglia. "We aim for an immersive experience with each product we design." NVIS is No. 2389 on this year's Inc. 5000 list.

### **Remote Presence Robotic System, InTouch Health**

Here's a cool super power? This device provides doctors with the ability to be in two places at once. This automaton features audio microphones, digital cameras, and custom software to allow patients, hospital staff and off-site physicians to communicate 24-hours per day. The LCD screen meets eye level and display's the doctor's face, adding a personal touch. The device is primarily used to provide round the clock aid victims of stroke, one of the leading causes of disability and death in the United States. "It's incredibly helpful to reach out to rural areas that are difficult for specialty doctors to reach," says Jennifer Neisse. Indeed, these robotic systems can save lives by sharing key knowledge to the nursing staff. Perhaps in the future, all the world's experts can be a screen away from their patients. InTouch Health is No. 289 on this year's Inc. 500 list.