

Green Home Tech Wins National Inventor Award

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Green technology got another nod Thursday night when an environmentally friendly method for building homes took the top prize at an annual inventors challenge sponsored by The History Channel and a division of the Inventors Hall of Fame.

Michael Sykes' "Enertia" building system uses milled wooden blocks that screw into place and trap solar energy to produce homes that heat and cool themselves.

Sykes was awarded \$25,000 and his invention will be featured with those of the four finalists on The History Channel's "Modern Marvels" television series during the week of May 15.

A home built with Sykes' materials contains small spaces between the walls that are connected to a glue-laminated, wooden sunspace that stores solar and geothermal energy. That sunspace contains cellulose, lignin and resin seeded with mineral crystals that release thermal energy over time to heat a home. During warmer months, the process is reversed and the structure instead absorbs heat from home appliances and people in the home.

The fossil fuel reduction of the Enertia system is akin to removing 50 cars from the road, according to Sykes.

"When I first became aware of the greenhouse effect, I was surprised to learn that the building and heating of homes was the biggest user of

fossil fuels," Sykes said in a statement. The invention process "was very challenging because no research or data on bio-energy carriers existed, so I was forced to write my own equations and perform my own research."

Medical devices dominated the finalist category.

Kim Bertron took home first prize for a device that simplifies the system for mixing a powder-form drug with a mixing solution in a syringe.

Dan Didrick, meanwhile, won second prize for his "X-Finger" invention, an artificial finger that allows amputees to control the movement of those fingers as quickly as they would their real fingers. He hopes to eventually adapt the technology for children.

"Currently children are not fit with cosmetic artificial fingers as they outgrow them too quickly," he said in a statement. "I intend to develop a device that will essentially grow with the child, offering function throughout childhood and adult life."

Third prize winner Christine Ingemi tackled hearing loss with a pair of earbuds with a volume limitation of 80 decibels. "As a mom of four children under 11 years old, I desired a safer alternative to traditional headphones," she said. "The next step is ... to create headphones that utilize the same volume-limiting technology."

Taking home fourth prize was David Krausman, who developed a sensor that attaches to the index finger in order to test patients for sleep apnea.

The second annual contest kicked off in the fall of 2006 and the 25 semi-finalists were announced in March 2007. After a brief tour of science and technology museums in San Jose, Saint Louis and Orlando, the inventions made their way to the Citigroup Center in New York, where

they will remain on display until May 25.

Top prizes were selected by a panel of judges who included Apple co-founder Steve Wozniak, New York Times technology journalist David Pogue, History Channel producer Mike Stiller, Time Magazine editor Jeremy Caplan, Shaper Image senior vice president of engineering and technology Andrew Parker, Invention and Technology editor Fred Allen and PC Magazine editor Stephanie Chang.

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