Celebrating Well-Executed IDEAs

IDSA's annual design contest yields scores of innovative, clever products

By Robert Grace

The Eargo hearing aid won not only a Gold IDEA, but also the Jury Chair prize, and the second annual Plastics Innovation Award, given by the Plastics Industry Association. All photos courtesy of IDSA

Two things were clear from the 1,872 entries to this year's International Design Excellence Awards (IDEAs), according to jury chair Michael Kahwaji. One is that China is really stepping up its design game, and the other is that a diverse cross section of high design and functional, everyday products is emerging today.

The IDEA 2018 competition—the 38th annual such contest organized by the Herndon, Va.–based Industrial Designers Society of America—crowned 145 winners, including 32 gold, 52 silver, and 61 bronze. IDSA honored the winners at a gala awards ceremony held Sept. 19 at World War II Museum in New Orleans during the group's annual International Design Conference.

The contest again featured a strong Asian presence, paced by 28 winning entries from Greater China and 26 from South Korea. The winners were chosen after extensive deliberation and debate by a group of 32 international jurors, headed by Kahwaji, who is senior design manager at Whirlpool Corp. in Benton Harbor, Mich.

This active Asian participation continues a trend noted last year, when 2017 IDEA jury chair Owen Foster also singled out China and said, "They're looking for an identity" as they seek to follow in the footsteps of South Korea in striving to become a design powerhouse. "They look at design competitions as a way to test themselves," Foster said last year.

Based on this year's entries, it appears they are increasingly passing the test.

"China is really dominating this competition," Kahwaji said in a recent interview. "They're crushing it, from a design standpoint. They've shifted from, 'Let's copy something' to 'Let's lead something'. And so the design that's coming out of China is legitimate now—not all of it, but the vast majority is good, compelling design. … There are more players, and they are dealing with more facets of design now."

The other key trend he pointed out was how this year's final results "showcase a diverse cross section of high design and everyday products that are thoughtful and considered." Many design competitions tend to attract

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— Michael Kahwaji
2018 IDEA Jury Chair

high-end, unattainable design. IDEA, meanwhile, does a good job of also highlighting everyday design, he said.

"I noticed that we're getting more high design in entry-level products," said Kahwaji, who was as an IDEA juror the two previous years before serving as chair this year. He attributes an increased interest in and awareness of design to the work of such companies as Apple and Samsung as well as, interestingly, do-it-yourself television programs that give average consumers insights into how quality design and good color palettes can transform a living space. He cited, for example, the HGTV network's "Texas Flip'N'Move" show, in which the hosts buy small homes, put them on a trailer, and redesign and renovate them in their backyard, applying all the latest trends and high design, to yield beautiful results but on a very modest budget. "A higher level of design now appears to be reaching a broader demographic."

"A lot of time," Kahwaji says, "products that are just engineered and not designed—they're still functional, they're just not *emotional*. Now we're seeing more well-designed *and* well-engineered products, and it just elevates things."

With that in mind, following is a modest selection of personally selected award winners, at all levels, that Kahwaji felt merited attention--some involving commercialized products created by established industrial design (ID) firms and brand owners, and others that are simply clever, well-thought-out student concepts.

Eargo

Gold/Medical & Health, Jury Chair Award & Plastics Innovation Award

Designed by San Francisco-based design firm Ammunition for start-up Eargo Inc. of Mountain View, Calif., the Eargo product offers a fresh take on the traditional hearing aid and was a three-time IDEA winner. Eargo is a Class I, FDA-regulated hearing device designed for adults experiencing mild to moderate hearing loss. Invented by a surgeon, Eargo earbuds fit discretely in a person's ear canal and are nearly undetectable by others. The product is less expensive than typical hearing aids—starting at $1,999 per pair—and rechargeable.

They work with patented Flexi Fibers, a soft, medical-grade silicone rubber that suspends the device in the ear without blocking the ear canal for natural sound and a comfortable fit. While hearing aids typically amplify sound using a small speaker, the Eargo device allows bass sounds to travel into the ear, so only treble sounds need be amplified. The small, pebble-shaped charger case boasts a soft-touch paint applied over an ABS/polycarbonate shell. It has multiple purposes—to store, protect, dry, and charge the earbuds.

Eargo is positioning itself as a new kind of hearing aid, targeting new users. Suspended in the ear by soft, patented, silicone rubber Flexi Fibers, the rechargeable device is barely visible, doesn't block the ear canal and allows bass sounds to travel into the ear, so that only treble sounds need be amplified.

Kahwaji said he chose to give Eargo his Jury Chair prize for several reasons—its simplicity, performance, and design were just a few. "Mainly, I truly appreciated the empathy the designers practiced when developing this fresh take on assistive devices. From the unboxing experience, to the first time use, as well as the maintenance, everything was considered."

Additionally, the Washington, D.C.-based Plastics Industry Association (PLASTICS) honored Eargo with the group's second annual Plastics Innovation Award from among all the IDEA entries. The award aims to recognize "the most creative, innovative, and best plastic application design."

WIM Interactive Stroke Therapy

Gold/Student Designs, and Best in Show

This year's Best in Show Award—as well as a Gold in the Student Designs category—went to an entry called WIM. Designed by Jenny Holmsten of Sweden and Thomas Helmer of Germany during their final year of study in the Advanced Product Design master program at Umeå Institute of Design in Umeå, Sweden, WIM is purely a concept at this stage.

It is a new type of interactive stroke therapy that empowers and supports a patient's recovery and enables one to carry out rehabilitation therapy at home without the direct help of a therapist. WIM consists of a spherical training tool made of transparent, polycarbonate as the shell, fitted with a colored silicone strap to enable flexibility. Both products are covered in a soft, durable jersey fabric that allows the light to shine through. This is accompanied by a tracking armband, the inside of which is made of soft polyurethane foam, covered in a black, breathable viscose material.

Though still a concept, the WIM student project won major kudos—including Best in Show—for its innovative approach to encouraging interactive stroke therapy in the comfort of the patient's own home.

Supported by a shared application, WIM enables continuous communication between patient and therapist throughout the recovery period. Guiding lights, sounds and vibrations in combination with muscle tracking technology enables WIM to "come alive," address all senses and adapt each session to the user's needs in a gamified way. The gamification aspect aims to spur the user to do more training, thereby speeding recovery.

Since the movement of the hand is recorded and analyzed throughout the day, the patient can receive feedback about the progress, both through the application and on the armband. The analysis of motion data empowers WIM to continuously adapt the training. Holmsten says she and Helmer developed both the physical objects and the digital applications.

Kahwaji says that WIM "truly leverages technology to improve the lives of many people. Not only did this product consider every aspect of the design, but it was also developed to allow for users to benefit from it while at home. We embraced this concept for two reasons—exceptional design and appropriation of technology."

Miko Smart Welding Robot

Silver/Student Designs

More students from Sweden's Umeå Institute of Design earned IDEA honors, with Ahsen Gülsen, Jon Sommarström, and Jakob Dawod receiving a silver award for their work in collaboration with ABB Corporate Research, a leading

Miko, conceived by students from Sweden's Umeå Institute of Design in conjunction with ABB, is a collaborative robot that is designed to offer safe, automated welding support to small jobs shops.

robotics company. Each has since completed their studies and started work at jobs in Denmark, France, and Italy, respectively.

Together they developed Miko, a welding robot that can help to automate small-scale metal workshops and make them more flexible and competitive. Designed to work safely in a close collaboration with humans, Miko can help users to avoid health risks caused by exposure to harmful fumes, strenuous positions and UV light. Miko also "finishes the job while the welder is planning for the next one, increasing efficiency and safety," the students explain.

Kahwaji, who suggests watching the brief video at bit.ly/Miko_video to better understand the product, says, "This is a really high-end concept. I appreciated that the students considered that small businesses or job shops might have to compete with big production facilities, and could use some extra help."

The students use cast aluminum for the base structure and arm, and ABS for molding the top enclosure, spool hatch, link tool, light-guard, and wheel structure. Weighing 90 kg and fitted on omni-directional rubber wheels, Miko works like this: The welder shows the weld path to Miko by simply going over the edges with a stylus called Link. With the help of an indoor GPS triangulation system and image recognition, Miko learns exactly where to apply the weld.

Link makes it possible to operate Miko in a more natural way, similar to how welding is done today. Because of this, Link's semantics are inspired by the traditional weld guns, which are already familiar to the welder. Activating Miko is simply done by docking Link into the interface. As a collaborative robot, it works at low speeds and stops when a person gets too close.

Though Miko is currently still a concept, Gülsen says she and her colleagues have received e-mails from welders and metal workshop workers asking where they can buy the product. This, she notes, gives them confidence "that we addressed a real need with this project."

Car Seat Buckle Magnet Clip

Bronze/Children's Products

Designed by Simon Kang and Thomas Birkert of Van Nuys, Calif.-based Munchkin Inc., the Car Seat Buckle Magnet Clips aim to eliminate one annoying aspect of parenting—fumbling with car seat straps while trying to strap in a wiggling child. The Brica® Car Seat Buckle Magnets safely attach to any car seat or stroller and use a magnet to hold the buckles in place and out of the way until parents are ready to use them again. Simply attach them with the childproof securing system, and touch the buckle to the magnet. Kahwaji says, "This is a pain point that no one has addressed."

Kang, senior product designer for Munchkin and its Brica sub-brand, explains they injection mold the upper and lower housings out of ABS, texturing them in the mold, and then join them via ultrasonic welding. Munchkin, which calls itself "the world's largest baby lifestyle brand," selected polypropylene for the buttons, Kang says, "since PP doesn't get stuck or welded onto the ABS housing when the ultrasonic welding is applied. The button needs to move up and down with a spring, and it requires a precise tolerance to slide on its track."

Inside the housing, there is an N50 zinc magnet that is 20mm in diameter and 3mm thick, and a stainless steel wire pin is strapped through an engineered structure. Designing a baby-proof safety pin proved to be one of their bigger challenges. So, he says, "We created a simple button that can work as a safety feature; it needs to be pressed down while a user disen-

Munchkin's latest product uses a plastic-enclosed magnet to hold baby car seat buckles out of the way until they are needed to secure the toddler.

gages the pin from its locked position." They went through hundreds of iterations and 3D printed many prototypes before cutting a test tool and eventually going into production on the clips, which sell for $7.

Grohe Sense & Sense Guard

Gold/Home

The Grohe Sense range of products can be described as a smart water sensor ecosystem for your home. Grohe Sense is equipped with a range of intelligent functions to detect, sense, and respond to the presence of water where it shouldn't be. The Grohe Sense Guard is a smart water controller that detects smaller leaks and dripping taps and—in the case of a burst pipe—shuts off the water supply. It constantly measures and compares water pressure, temperature and flow with preset thresholds.

And of course, it's Internet-connected: Open the Grohe Ondus app anytime and anywhere to get the latest status from home. You also can shut off the water supply when you leave the house or, if you forget, by using your smartphone.

Grohe, which designed the product internally, notes that for all its Sense products, it employs a consistent, minimal, and pure design language by using the similar colors, materials, finishes and design details. Seeking a high-tech, smart-home image, Grohe uses a matte white finish. For this range, it uses acrylonitrile styrene acrylate (ASA) for the housing, and Perspex®-brand acrylic (PMMA) for the insert material, with applied graphics. Its signature feature is the light ring that surrounds the device. This supports the set-up process and visually signals any alerts.

"We needed a lighting effect that didn't bleed through the unintended areas, yet was visible to show when there was an alert," according to Michael Seum, vice president of design for Germany's Grohe AG. "A lot of attention was paid to the materials on this detail," to ensure proper light transmission to get the intended effects. It used clear ABS and polycarbonate for different parts.

Kahwaji comments: "Beautiful design, good use of plastic, good product."

The Grohe Sense and Grohe Sense Guards are two Internet-connected products in the same family that help to detect and prevent water-related mishaps in your home. The Sense (top) is a physical sensor that sends an alert to the app user if it comes into contact with water; the Sense Guard is an inline device that senses water pressure changes.

Kodak Printomatic

Bronze/Entertainment

Designed by Ammunition for C&A Marketing, the Kodak Printomatic "merges the nostalgia of the classic Kodak Instamatic camera with digital instant-print technology to

The 10-megapixel point-and-shoot Printomatic Camera instantly and automatically prints color or black and white photos directly from the camera body. Designed by Ammunition in San Francisco, it aims "to help make Kodak relevant to a new generation," while tapping into older consumers' nostalgia.

create a decidedly modern form." With its minimal controls and highly compact retro design, the product is meant to appeal to the Instagram generation, who may not have had the experience of taking a photo and instantly holding it in their hands. The 10-megapixel point-and-shoot Printomatic Camera instantly and automatically prints color or black-and-white photos directly from the camera body.

Available in yellow, grey, black, blue, and pink, the camera has a suggested retail price of $69.99. The 2- by 3-inch prints it produces on Kodak Zink photo paper are water- and tear-resistant and adhesive-backed. No computer connection, ink cartridges, or toners are needed. Equipped with an auto-sensor flash, it allows you to shoot a new photo while printing the previous shot.

Kodak says the Printomatic's classic format and details are inspired by the Kodak Instamatic 233, designed in 1970 by Pentagram's Kenneth Grange. The components are molded from polycarbonate/ABS. Weighing 220 grams, the camera aims "to help make Kodak relevant with a new generation. It also taps into older consumers nostalgia for photos you can touch and hold."

Philips Sonicare 9700 DiamondClean Smart

Silver/Medical & Health

This is one smart, and attractive, toothbrush. The Philips Sonicare 9700 DiamondClean Smart features a meticulously crafted handle. A smart brush head and motion sensor inside the handle allows real-time guidance for optimal brushing via the connected app, providing easily understood information.

"Everything about this product is well designed," says Kahwaji. "It's a $200 toothbrush, but the charge lasts for weeks, and the travel case has its own battery" and USB charger. At home, one places the wand into a supplied glass cup that plugs into the wall, and the device recharges via induction through the glass.

The handle wakes up from idle status by touching the handle, and illuminates which mode and intensity was used in last brushing. During brushing, the bottom light ring blinks in purple together with vibration changes to indicate you are brushing with too much pressure. It also offers a visual reminder when a new brush head is needed.

Philips declined to elaborate on the materials, but said it used "composite plastic, soda lime glass, and pleather materials," with the latter used on the cover of the travel case.

The Philips Sonicare 9700 DiamondClean Smart toothbrush is expensive, but is beautifully designed, offers sensors and feedback to help you brush more effectively, and can be recharged via a carrying case or a glass charging cup.

Radius™ Temporary Site Light

Gold/Commercial & Industrial

Designed by Justin Dorman, David Proeber, and Kyle Harvey of Milwaukee Tool, the Radius™ Temporary Site Light is described as a job-site luminaire that is easy to set up and can instantly light up the work space with 7,700

Milwaukee Tool's new Radius Temporary Site Light is a job-site luminaire that is rugged, bright and powerful, easy to set up and energy efficient. It also offers a universal power supply that allows more lights to be wired to it.

lumens of light—exceeding the performance of existing 105-watt fluorescent lights, while consuming 30 percent less energy. Users will have the ability to wire more lights per circuit on any voltage range between 120 to 277 volts with a quick-wire universal power supply.

The $199 light features an optical design that delivers a consistent beam, optimized color temperature, and true representation of color detail leading to a more productive work area. This luminaire can hang from virtually any overhead area with its hanging cable that features spring-loaded cable retention so the user can speed up the installation process and easily adjust the height of the light during installation.

The product, which measures 13.5 x 6.5 inches in diameter and weighs about seven pounds, is made primarily from high-impact, high-voltage-tolerant PC/ABS, with an extruded and machined aluminum heat sink. "This is very well built," notes Kahwaji.

Ryobi 40-Volt Jet Fan Blower

Silver/Outdoor & Garden

The Ryobi 40-Volt Jet Fan Blower is said to deliver a cleaner, quieter, gas-like performance to help users clear heavy leaf debris. Fueled by fade-free lithium-ion technology, this cordless blower showcases a new airflow architecture. Ryobi, a brand of Hong Kong-based Techtronic Industries Co. Ltd., says users will now be able to clean their lawn when they want, without disturbing their neighbors.

For heavy or wet debris, users can opt for an extra performance boost via a thumb-activated turbo button. For added control, a variable-speed trigger can be used in delicate areas such as flower and mulch beds. The new, dual-stage airflow design (two brightly colored fan blades are visible through the transparent structure) produces significant power to easily move through leaves.

Ryobi's new, lithium-ion-powered electric leaf blower is said to deliver gas-like performance while being much quieter and cleaner than gas blowers

Designed for The Home Depot by Techtronic's own Sean Campbell, Erin Helmberger, Keith Long, and Matt Malone, the product costs $149 (including battery and charger), and weighs eight and a half pounds. The company says it used injection molded ABS, as well as polyoxymethylene (POM), also known as acetal, glass-filled nylon, and steel.

Oculus Touch VR Controller

Silver/Entertainment

One uses the Oculus Touch VR Controllers when wearing a virtual reality headset. Oculus claims that Touch brings the magic of hand presence—the feeling that virtual hands are actually the user's own hands—to life in virtual reality. As part of the Rift product family, the Oculus Touch provides accurate real-time hand tracking; a touch-sensitive control interface to enable social interaction hand gestures like thumbs-up, "OK," and pointing; and a fully featured set of buttons and controls for intuitive and immersive gaming in VR.

The in-house-designed Oculus Touch VR Controller aims to bring "the magic of hand presence" to life for those using virtual reality headsets

It was designed by the Oculus Design Team for Oculus/Facebook to make Touch feel like a natural extension of the body. The tracking ring, a major element defining the product icon, surrounds the user's hand, moving the center of gravity to the grip axis, improving balance and reducing the feeling of inertia during motion-tracked gaming and experiences. The handle is sculpted to fit a large range of hand sizes and to rest naturally in the hand in a relaxed grip posture. After producing countless hand-built, 3D-printed, CNC-machined prototypes, the team used Cycoloy PC/ABS, various grades of Lexan, Thermocomp and Lubriloy polycarbonates, as well as a self-lubricating Duracon acetal.

"They fit very comfortably and, to me, this is just good design," says Kahwaji.

Oxo Good Grips POP Containers

Bronze/Home

The Oxo Good Grip POP Container is an airtight, stackable dry-food container that offers single-handed operation. Users can open and close the lid by simply pushing a button in the center.

Once depressed, the button becomes the handle on the lid. They come in 18 different sizes. In addition, the thin lid and slim styling offer increased storage capacity. Additionally, a variety of the accessories (such as scoops, flour sieves, etc.) can attach to the underside of the lid.

Oxo says the POP containers have achieved a high degree of airtightness, which traditionally has been a challenge with rectangularly shaped containers. The company attributes that to an unspecified "special part" they designed on the inside. The range was designed by Tamotsu Matsumoto, Makiko Kida, and Taiki Nosaka of Japan's Form Co. Ltd. for Oxo International Ltd. The lids are made from ABS and polypropylene, with silicone on the underside and an acetal hinge. They also made unspecified use of SAN resin. The lid gasket also can be easily removed for cleaning or replacement.

Form Co.'s website says that Oxo has sold 2.5 million units of POP containers worldwide in just the first 14 months.

Oxo International worked with Japan's Form Co. Ltd. to develop this latest in its line of kitchen storage containers for dry food. They are stackable, airtight and can even hold accessories (inset).

Modern Weave

Bronze/Furniture & Lighting

As part of the Eames Good Design Challenge, KEM Studio of Kansas City, Mo., was required to come up with a variation on the iconic Eames Molded Plastic Chair. The result is the Modern Weave.

"For our exploration," explains KEM co-founder and principal Jonathan Kemnitzer, "our big idea was to 'upholster' a chair in a different way while providing comfort

KEM Studio found a way to incorporate soft goods into the iconic Eames Molded Plastic Chair, as part of a design challenge. By weaving thick wool through holes in the chair seat, it transforms "upholstery" typology.

and pattern through a richness of materials." Instead of wrapping a textile over foam, creating an entirely upholstered chair or a smaller version in the form of a seat pad, Modern Weave transforms the "upholstery" typology. By creating defined parameters for material subtraction/addition, KEM was able to manipulate a chair without losing structural and visual integrity, without using "a molecule more than necessary."

The base of the Eames Molded Plastic Side Chair manufactured by Herman Miller Inc. is injection-molded out of polypropylene. "For our study," Kemnitzer says, "we created our pattern and drilled into the chair shell. If this was a real product, the pattern would be molded into the chair shell."

Modern Weave is a continued exploration of reinterpreting a traditional technique (weaving) in a modern way. KEM Studio's original exploration won the Eames Good Design Challenge and was then auctioned off to raise money for the Ronald McDonald House Charities. In this second manifestation of the exploration, Modern Weave has a refined linear pattern that is visually elegant from every angle while enhancing user comfort.

Kahwaji, meanwhile, notes, "This is a nice integration of plastic and soft goods. It's a fresh take that I haven't seen done anywhere."

Abaxis VetScan VUE

Gold/Medical & Health

Abaxis Inc., a Union City, Calif.-based maker of diagnostic instruments for veterinary point-of-care services, won a Gold IDEA for its Abaxis VetScan VUE, the first app-based diagnostic instrument in the veterinary marketplace. While other products in the diagnostic field incorporate large touchscreens and onboard printers, the VUE takes a more minimalist approach. Offloading most of the functionality onto the user's common mobile device, the VUE is reduced to a quarter of the size of related devices and has only one physical UX touch point: the Rapid Test drawer.

Designed for Abaxis by San Francisco-based Huge Design LLC, this device—when paired with patented Rapid Test cartridges and the VUE mobile app—enables veterinarians to quickly scan patient samples, diagnose life-threatening diseases, and automatically document the results in the patient's chart from the exam room. Prior to the Vetscan VUE, veterinary staff were required to hand treat each Rapid Test and then perform a visual eye exam to determine the results. The purpose of integrating the Vetscan VUE reader and the VUE app is to deliver accurate results on every test while simultaneously saving time for the veterinary staff.

Abaxis worked with Huge Design to develop the VetScan VUE, the first app-based diagnostic instrument in the veterinary marketplace. The small, minimalist device offloads most of the functionality onto the user's mobile device.

The simple two-part housing, which is molded in ABS, has an inner face that is purposely recessed to expose the fluid samples and keep the interior of the scanner sterile. The bold chamfered surface guides the user's fingers inward for an easy to locate grip on the drawer.

Apex Mach 1 Speed Skate

Bronze/Sports, Leisure & Recreation

Based in Montreal, Canada, Apex Racing Skates has reinvented the ice-skating boot to be more adaptable, 40 percent lighter, and easier to use. An epoxy-based, full carbon-fiber

Leave it to French Canadians to come up with a better ice skate. Designers at Inédi in Quebec designed this epoxy-based, carbon fiber monocoque skate shell for Apex Racing Skates that slips on and is 40 percent lighter.

monocoque replaces traditional materials in the Apex Mach 1 Speed Skate. A removable heel allows the boot to fit the front of the foot for maximized support and control. And under the foot, the boot merges with the insertions supporting the blade.

"We chose to work with epoxy resin because we wanted to have the stiffest boot possible" and epoxy is a good match when using carbon fiber, says Claude Sauriol, an industrial designer and researcher with Inédi. Sauriol is credited, along with Inédi colleagues Sylvain Poirier and Benoit Carignan, with designing the boot for Apex Racing Skates. Inédi is a technology transfer center in Quebec that specializes in industrial design and is connected with the college Cégep régional de Lanaudière à Terrebonne.

For speed skaters, Sauriol says, the ultimate boot is never stiff enough and never light enough. So Inédi got to work. "The main reason we decided to remove the slot on the top of the skate (where usually there is a lace) was because we knew that if one could put on the skate from the back of the boot, then the resulting intact geometry would allow us to create a much stiffer boot." The biggest challenge was to define where to cut the boot in the back without sacrificing its integrity, while keeping the lateral support needed and still enabling the user to slide the foot into the skate.

The project's goal was to significantly reduce the weight of a high-end, short-track speed skate while maintaining or improving its performance. For a top athlete, shedding several ounces can make a real difference at the end of a race, which can be decided by milliseconds. These skates are for serious racers, as they cost $4,500 per pair.

South Korean designers came up with this concept for making an IV pole more fun and friendly for children in the hospital. The molded bear head is a ride-on toy with wheels that "bring a little bit of brightness to a child's life."

Bearpole

Bronze/Student Designs

The Bearpole is a medical IV pole designed to give children a safe and happier experience in a hospital. The bear-shaped riding toy has five wheels for stability, a portable adjustable-height pole, and four hooks on the pole top that provide a secure place to hang bags containing intravenous liquids. Children are able to move the IV pole easily using their feet wherever they need to go. The friendly bear design helps ease children's fear of the IV.

Dr. Youbin Kim and Juhee Lim of Superbean Co. Ltd. and Hanyang University designed the product for a Korean company called Mom's Medi. Kim is chief executive officer of Superbean, which provides design and education services for children in Seoul, South Korea. She says she entered the product in the student category because she was a doctoral student at the time of submission. Earlier this year, Kim began operating Studio High by Superbean as an integrated design studio in Houston.

Her aim is to have the bear's head molded as a single piece out of recycled HDPE, though Mom's Medi has gone to market with a pilot version made out of virgin. The product is easily assembled using a single join and the bear-shaped riding toy is compatible with all standard steel IV poles on the market and used in hospitals. It rolls on elastomeric polyurethane wheels.

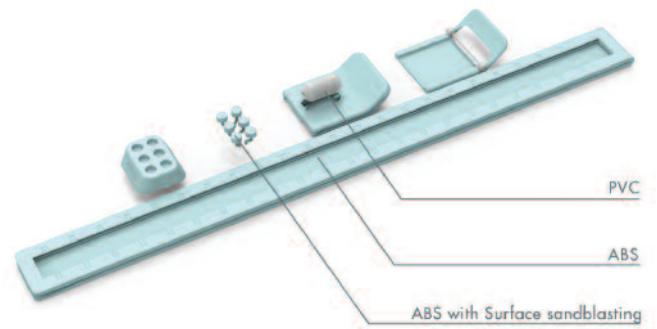
Kahwaji likes concept, noting, "You're adding a little bit of brightness to a child's life, in a bad situation. It's adding a bit of fun for kids who are cooped up in a 10-by 10-foot room."

U-pen Braille Writing Tool

Gold/Student Designs

U-pen is a portable writing tool designed to make communication faster and more efficient for blind people. Currently, sight-impaired people use a stylus and slate to write Braille, which can be difficult to use and to carry. U-pen was conceived by Beijing Institute of Technology student Peigen Liang to be a user-friendly "pen." It is a long slate that can be fixed on any A4 or smaller paper.

Users press the buttons to type Braille letters. After typing one letter, they move the slider to the next notch. When the line is completed, they scroll the roller to move the paper upward and start typing on a new line. A clicking sound helps users to locate the position of the slate. U-pen also has Braille instructions on how to use it.



Another student concept, this coming from Beijing, U-pen offers a compact, portable aid to help blind people compose Braille writing. Jury chair Kahwaji declares: "This is a genius idea."

> "As a student design, this is a genius idea. It's inexpensive, and there's a low barrier to entry. These two are easily commercialized, and can be leveraged into manufacturable products."

The product weighs 40 grams and is to be made by injection-molding durable ABS to keep the price low. The surface of the six buttons and slider is sandblasted to increase hand grip friction. He foresees the roller and the clip being made of aluminum alloy.

Liang says he is looking for someone to manufacture the product.

Kahwaji states: "As a student design, this is a genius idea. It's inexpensive, and there's a low barrier to entry." Speaking of both the Bearpole and the U-pen student designs, he notes also, "These two are easily commercialized, and can be leveraged into manufacturable products."

To see all of this year's IDEA entries and winners, go to www.idsa.org/idea.

ABOUT THE AUTHOR

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