



THE

BEST-DRESSED NEST

Three sources come together for a chandelier rebirth, while hypnotizing observers with sparkling electroluminescent innovation.

BY AYESHA J. GALLION

The Nest light proves that good things come in threes. Its concept was forged by powerhouse designer Yves Béhar, the energy-efficient light source created by E-Lite Technologies, and its high aesthetic crystallized by Swarovski. The trinity has opened the doors of commercial and residential spaces whose designers may not have otherwise welcomed a traditional chandelier.

Béhar and the team from his San Francisco-based design company, fuseproject, produced Nest with the intention of modernizing the composition of the chandelier while remaining committed to its most time-honored

element: crystal.

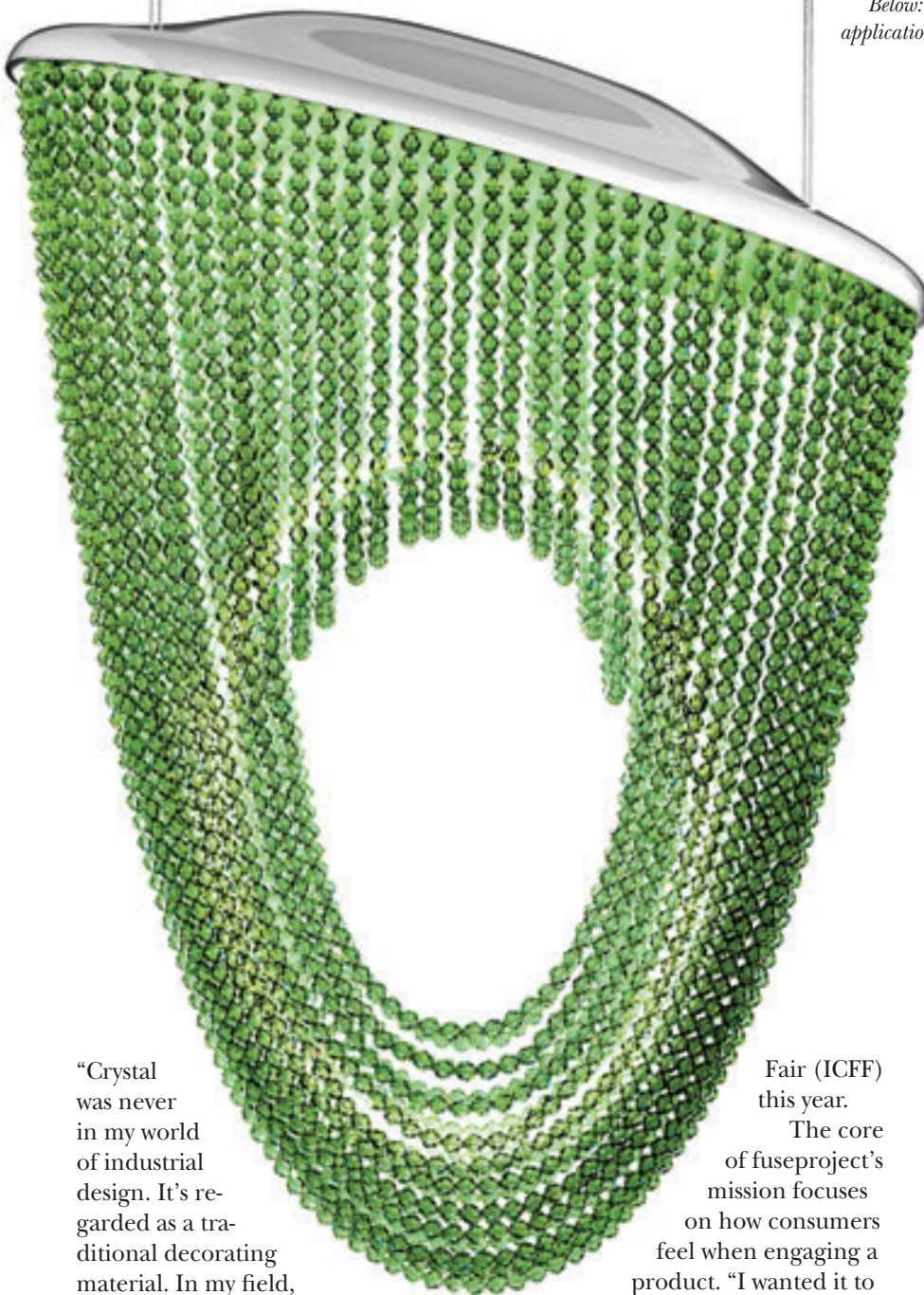
The creation of such a product may be ideal in theory, but integration of the light source had to be equally impressive. E-Lite Technologies' electroluminescent Flatlite[®], which can be seen in everything from signage to stage sets for TV's *American Idol*[®], made the grade.

Béhar has revamped items such as Birkenstock[®] gardening shoes and Toshiba laptop computers. At the beginning of 2004, Nadja Swarovski approached him about participating in her company's April debut of Crystal Palace, an exhibition of "chandeliers reinvented as an art form."

Left: The 600-pound Nest in clear crystal.

Above: The thinness and flexibility of Flatlite[®] is useful for a variety of installations.

PHOTO: SWAROVSKI.



“Crystal was never in my world of industrial design. It’s regarded as a traditional decorating material. In my field, we look for innovation. It’s just not looked at as a modern object,” says Béhar, a native of Switzerland.

He accepted the challenge of working with a resource that is more likely to attract aristocrats than the dot-com generation. The 12'-high Nest chandelier weighs 600 pounds and incorporates the high-tech Flatlite plus 7,500 crystals. It was unveiled at the Salon del Mobile in Milan along with nine other reinventions and subsequently went on to be shown in New York City at the International Contemporary Furniture

Fair (ICFF) this year.

The core of fuseproject’s mission focuses on how consumers feel when engaging a product. “I wanted it to be an emotional object, where

I could put the viewer in the center. The light draws people in, instead of them looking up or seeing the underside of a chandelier,” Béhar explains.

“I had to use technology to move a traditional material into the future. Crystal is at its most beautiful when lit, when it’s free, hanging on a chain, not rigid. My inspiration was the natural way in which something hangs, like a necklace,” he comments.

Béhar still faced some obstacles in unifying the components of Nest, despite his desire to revolutionize a classic lighting style. Practical items

Left: The Mini-Nest chandelier in peridot.

Below: Yves Béhar, the designer of Nest, found a unique application for electroluminescent lighting: a chandelier.

– such as a transformer – and accommodating the film that makes up the electroluminescent light source had to be addressed.

“It was difficult integrating all of the pieces. The transformer and character effects had to be harnessed. There’s an induction that happens with film where the electricity centers back onto itself. We had to isolate two films,” he shares.

The soft, moody glow of the light is attributed to two outward-facing Flatlites held together with a resin frame lined with rubber.

“Like a sandwich,” Béhar states, adding humorously, “Luckily we have a couple of surfers on staff who are really good with resin.”

Béhar, whose designs have been exhibited at the San Francisco Museum of Art, founded fuseproject in 1999, five years after his training at the Art Center College of Design’s European campus in La Tour-de-Peilz, Switzerland, and its main campus in Pasadena, California.

His team constantly fiddles with an array of components in search of just the right fit. Béhar was already familiar with electroluminescence when he was approached by Swarovski.

“We had been looking at Flatlite for about three years, but we hadn’t found an application that made sense. There are always interesting materials that we have around, just itching to use somewhere,” he comments.

When fuseproject decided that organic light emitting diodes (LEDs) were too costly,

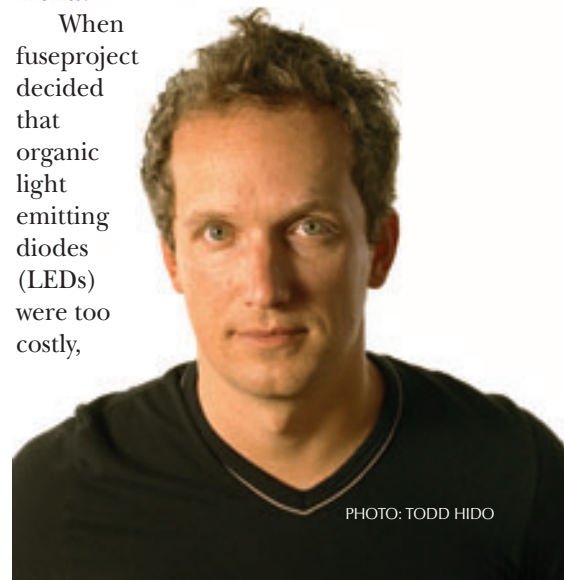


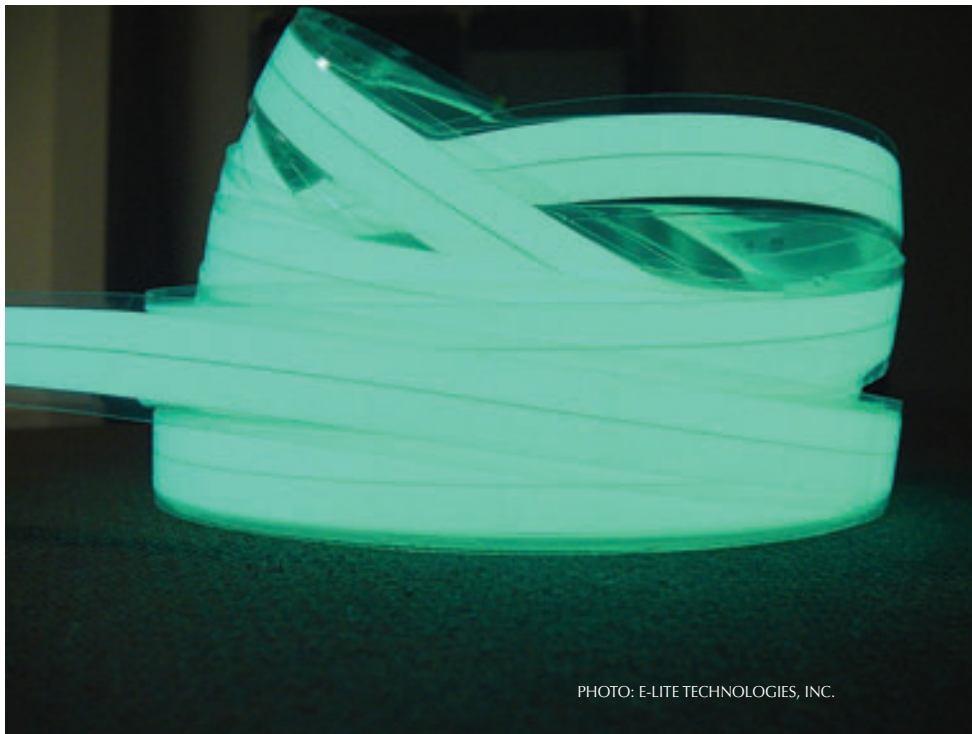
PHOTO: TODD HIDO

the idea to employ Flatlite surfaced. Although Flatlite is expensive, it is less so than their first choice. Implementing it in a luxury item was the most practical route, Béhar insists. The price for the light alone makes it clear that hoi polloi will not be eating an Extra Value Meal™ under this cocoon of crystal.

Made in Germany, Nest can be purchased directly from Swarovski, or through select showrooms in Milan, and in the U.S. from Moss in New York City. While the original Nest's size is a limited edition, smaller forms of the Crystal Palace model, the Small Nest and Mini-Nest, are available. The 600-pound version retails for nearly \$88,000. The 220-pound Small Nest's dimensions are 47" x 39.3" x 11.8" and costs around \$13,000. Mini-Nest weighs 66 pounds and its dimensions are 19.7" x 15.7" x 4" with a retail price of approximately \$5,500. Some of the crystal hues Nest features are Clear, Jet Black, and Peridot.

Béhar says that fuseproject will sell the dimmable luminaires by the end of the summer. He has yet to install his own version at home, but ensures that he will eventually.

It could be that many retailers, interior designers, and urban/country dwellers interested in integrating cutting-edge décor into their settings believe that the traditional chandelier has lost its luster. Nest is attrac-



A coiled pile of green/blue Flatlite®.

PHOTO: E-LITE TECHNOLOGIES, INC.

tive, more appealing to the Star Trek: Voyager crowd. It's rather difficult to envision Enterprise's Captain Kirk and Spock eating a space salad under its glow.

As for living and dining rooms illuminated with mass-market torchieres and six-light, finished-in-the-latest-shade-of-pewter chandeliers – new trends in home lighting are waiting to snuff out the stale. Béhar's ability to reinvigorate traditional forms, as he did through Nest, may inspire more designers to think outside the box.

"I hope it has created a spark," he notes. "Few companies offer the opportunity to reinvent. They don't

want to take that risk." However, Generation X and Y consumers are grown up, willing to at least modestly furnish their residences, and are "open to the innovation of things."

Other lighting products are on the horizon for fuseproject, though the details, Béhar says jokingly, "...are a secret.

What I can tell you is that they will be less decorative and more functional."

In the meantime, Nest continues to attract attention despite competition from other eye-catching members of its royal family in the Swarovski Crystal Palace.

"All of the pieces in this collection are very one-of-a-kind and limited," says Sarah Kesler, communications assistant at Swarovski North America. Creating a cheaper, lower-end Nest would clash with the concept of the Crystal Palace collection, she asserts. "They are considered our couture."

Kesler shares that Nest and Béhar's other chandelier, Voyage, have been well-received by the public. Voyage, a one-ton piece made of 52,000 crystals and 2,000 motion-sensory LEDs, is on display in New York's JFK International Airport in Terminal 4.

"Yves' work has gotten great reaction from various design communities each time," she affirms proudly. "He definitely brings a different perspective to light, and that's the Crystal Palace initiative."

Béhar's fixture utilizes prized Swarovski Strass® crystals, which are cut with computerized machines and laser-engraved with a signature. This particular brand of crystal, known for its refractive properties, provides a



PHOTO: E-LITE TECHNOLOGIES, INC.

Flatlite® on a roll. The material can be cut with scissors.

special certificate for pieces over 1.2 centimeters. The components are full lead crystal with at least 30-percent lead oxide. Dust and moisture buildup are a rare concern for the chandelier owner because of the applied finishing technique.

The Austria-based crystal compa-

ny's product is a favorite among lighting, fashion, gift, and jewelry industry professionals who sell sparkling and dazzling merchandise. Manufacturers and retailers make sure to brandish the Swarovski and Strass names when boasting about their chandeliers. The crystals come in a rainbow of colors

such as Tanzanite, Hyacinth, and Indian Sapphire.

Nest could be an indication of yet another direction showrooms could take, as it embraces art, technology and function – qualities that many consumers want reflected in their furniture and accessories. Lighting does not have to be an exception. ❖

A NEW ILLUMINATION TREND

Flatlite® distributor Glen Bundrick, whom Yves Béhar contacted to order the light source for the Nest fixture, explains that he wanted to give U.S. retailers and designers easier access to the technology. Five years ago when Bundrick worked as a production manager in medical communications, he attended the Photo Marketing Association trade show in Orlando. When he saw back-lit Duratrans® graphics, the idea of medical posters aglow occurred to him – and his quest to obtain an appropriate light source began. The search was grueling and propelled him to start a distribution business, Luminous Film, based in Shreveport, Louisiana.

"I tried to order the stuff. After nine months, I gave up. The company was in Germany. I then tried to find manufacturers in the United States that would be interested in buying the products if I resold them," he says.

Béhar consulted Bundrick for about one year during the design process for Nest, which entailed a lot of tweaking. "They made a prototype and learned by using different sizes of the light." He calls the ultramodern chandelier "Beautiful."

At less than .5 millimeter thick (that's thinner than a credit card), the flexible electroluminescent material contains no breakable filament. It is produced in 30"-wide x 1,200"-long rolls, which are slit, scribed, and laminated into shapes specified by the customer. The light can be dimmed or made to flash, and is also energy efficient. A one-foot strip of the material requires less than .54 watt at full intensity.

Electroluminescent lighting in signs, autos, portable electronics/backlights, and other emerging sectors has increased considerably since 2000, when its initial estimated revenue was just over \$300 million. This year that figure nearly tops \$750 million, and by 2010 is expected to be near \$900 million. Interior décor and lighting industries are still experimenting with ways to incorporate light sources other than incandescent, halogen, or fluorescent. And, while the portable electronic and backlit segment is the biggest market for electroluminescence, Flatlite's competition – LEDs, incandescent lamps, and neon – is still locked in an embrace with loyal designers.

Nevertheless, the Flatlite craze has skyrocketed sales at Luminous Film, especially after fuseproject's Nest debut, according to Bundrick. The light source, with 40 percent of its sales in Europe, was highlighted as a "Magically Modern Light Emitting Object" on an episode of *American Home 2005* on HGTV,

along with glow-in-the-dark rugs, light-transmitting concrete, and Luminex® fabric.

"Our profits have increased by 25 percent each year. More people are finding out and want to do projects with Flatlite, which has spurred a lot of creative juices," he declares.

Ted Appelberg, chairman of E-Lite Technologies, reports that ¼-inch strips of Flatlite will be placed in the stairwells of the new 7 World Trade Center (7WTC) in New York City. The light will be six inches above the floor and will lead to exit doors, also bordered by Flatlite. A total of 40,000 linear feet of the source will be featured in the building, slated for completion this year.

Appelberg helped develop Timex's Indiglo®, an electroluminescent source for watches, about 20 years ago. This type of lighting has been studied and developed for years, but no one was able to generate endless, flexible sheets of it like Flatlite, he boasts.

"Beginning in the '60s, a lot of companies tried – even Timex. We were the first that was able to do it," Appelberg says.

The component's patented "split electrode" (an electrical conductor) excites the encapsulated phosphor crystals (unencapsulated phosphors can be damaged by moisture). Upon receiving the energy, they emit a heatless light that is highly visible, even in smoke or fog. Flatlite is optimal for informational, decorative, accent, and architectural lighting because it is high in luminance. The low illuminance, however, makes it unfit for ambient or task lighting.

Flatlite comes in white and green/blue. The latter color-combo has the longest life, and when not illuminated, has a white appearance. The white light is salmon-colored when off because of a fluorescent red dye added to its blue/green phosphors – an important note for designers to consider. Eventually all phosphors' light-producing abilities expire. Color filters allow for custom-hued Flatlites.

When asked why some designers may be slow to adopt Flatlite for their projects, Bundrick replies that lack of familiarity could be the cause. "Fear of the unknown. It is a bit expensive. When a tungsten or fluorescent is not appropriate or too thick, Flatlite can be used for so many things – seats, limousines, on dance floors, in point-of-purchase signage, or on a table top for a more futuristic look," he explains.