

MMM Takes A Look at Industrial Design Firms

By Mike Klasco and Nora Wong

It is too easy for engineers working on audio and video products to become caught up with the guts and lose sight of the exterior. After all, audio engineers live on the inside, but the store buyers and consumers see only the shell of the product. Consumer electronics retail has reached the sorry condition in which most products are not even operating for in-store demos; sometimes just the shipping cartons are piled up and not even opened! So the product may only be seen on the web, the ads, and the image on the shipping carton. The audio/video quality may only be realized when the product is finally set up at the end-user's home. Of course, if the product is a stinker, then back it goes and vendors know how quickly junk makes it back to the store returns counter and your B-stock inventory.

Appearance has always counted, but now with the aesthetics often being the only contact the consumer has with the product at the store, looks count more than ever. In a recent article about Robert Brunner's Ammunition Group industrial design firm, *Business Week* called this the

"Age of Design." With the deepening recession keeping the consumers' death grip on their wallets, it takes truly aspirational and iconic products to make consumers line up at Apple stores to pay 50 points markup on consumer electronics rather than pay the rent.

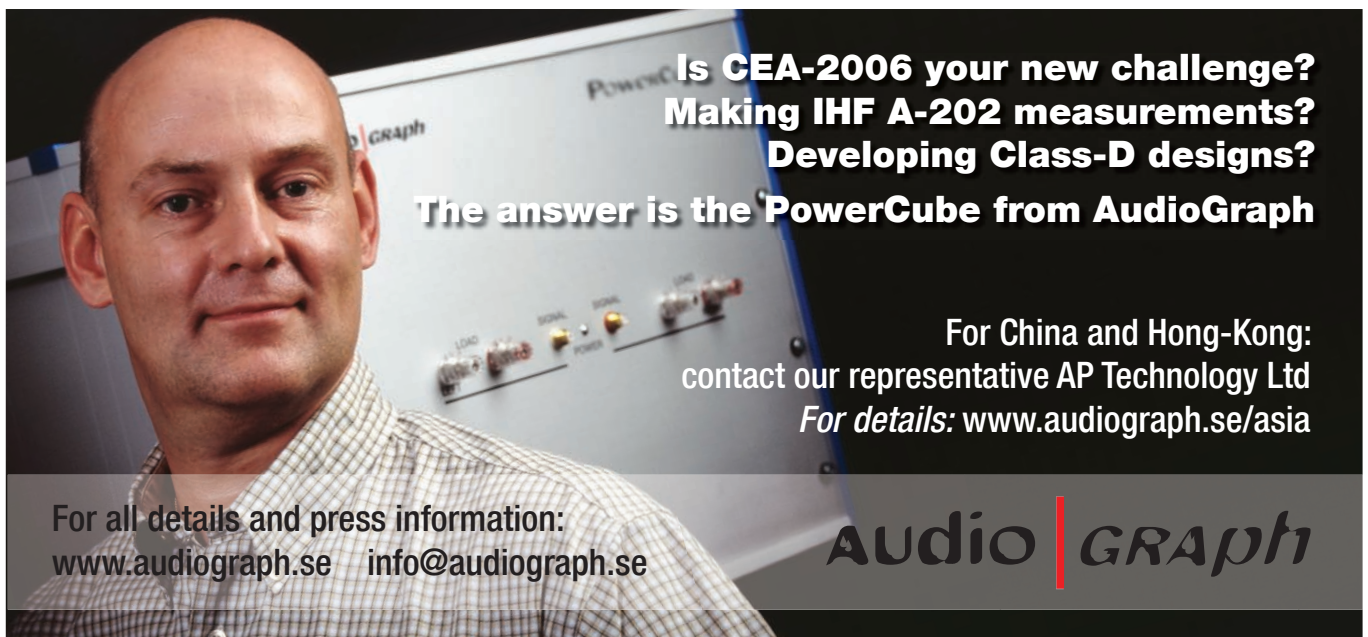
For the last two decades our firm, Menlo Scientific, has worked with many industrial design ("ID") houses. Projects included audio support for IDEO for Cisco's ground-breaking Internet business phone, frogdesign for the Acer Aspire computer monitors, Fiori for Intel tablet computer concept project, GVO for Leapfrog learning products, and quite a few others.

I would be rich if I had a dime for every time one of my peers vented about the price/performance of some B&O, Apple, Bose, Sony, or other prestige products priced due to their branding cache rather than bill of materials (BOM). Yet instead of jealousy at these successes, perhaps we could learn a lesson from this. But you would be fooling yourself if you thought ID houses were just concerned with style, not substance—

they provide more than sizzle.

I certainly know the tug-of-war game of the industrial design firm carefully specing a knob, or some special alloy of stainless steel, or other premium material, only to have the offshore development engineer replace these refined components with "a more sensible, cost-down" substitute. The ID house often contributes to the ergonomics of the product (the human interface—specific examples range from the intuitive iPod to the techno-idiots who cooked up the original iDrive on BMWs).

Often, the ID house is the gatekeeper for maintaining product quality all the way through design to manufacturing. Much of our work with ID houses bounces us between the mechanical engineering guys for the tooling and enclosure construction, for issues such as integrity of the product. It is always a surprise to me to walk through a Sharper Image, whose products look so slick in a color catalog, but just do not make the grade when sitting on the store shelf. Of course, Sharper Image is in the middle of bankruptcy now, so cus-



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tomers have already voted on this. Often it is the ID house that keeps the product honest, protecting the design integrity from both the vendor and the brand's own bean counters.

This article takes a quick look at a half-dozen design firms. ID firms' agendas vary significantly. Some are artsy and concentrate on concept work that ends up in museums but not on the store shelves, while others specialize in mechanicals and tooling design and support other ID houses. Some manage to make their art real and producible and lead the industry.

AMMUNITION GROUP

A San Francisco startup of industrial design guru Robert Brunner, Ammunition Group is, perhaps, a first-time example of a new ID house starting at the very top. Brunner set up Apple's ID team and led them to produce the PowerBook, which was the turning point for Apple. After he left, the in-house ID design team went on to pen the iPod.

Recent Ammunition Group projects include the Dr. Dre headset for Beats (by Monster) (*Photo 1*), and a soon-to-be-introduced state-of-the-art LCD TV. Recent developments include expansion into branding and corporate identity—aspects of this include market position strategy, logos, trade show booths, the look of the advertisements, and so on. Visit www.ammunitiongroup.com—you will recognize more than a few awesome products.



PHOTO 1: Ammunition Group Beats by Dr. Dre headphones (Monster Cable).

DEEP BLUE DESIGN

US and European customers required expert design services located near China with both English- and Chinese-speaking design talent. This condition produced the need for a small design house such as Deep Blue Design. Their initial success was with the pro-audio industry for clients such as Samson Technologies, Sam Ash Music, Coustic, Numark, and so on. Deep Blue Design rapidly took on work covering telephony (Lucent and V-Tech), domestic appliances, and consumer electronics.



PHOTO 2: Deep-Blue Design AT&T Bluetooth DECT.

The success of Deep Blue's design approach has been built on understanding what its customers—the market and end-users—are looking for. Based around the term "Appropriate Imagination," Deep Blue (www.deepbluedesign.hk) approaches design as a strategic business tool that helps companies to improve their bottom

line. Did I mention their fees are well below market pricing?

IDEO

Founded in 1991, IDEO is a high prestige design and innovation firm. Their website (www.ideo.com) mentions other statistics such as 345 awards, 1000+ patents, and 672 pounds of peanuts consumed a year. They have also done great work for Samsung (monitors and more), the interior cabin for the Eclipse personal jet, many of Altec Lansing's docking stations, and Tivo products. Other clients include Microsoft, Nokia, Intel (*Photo 3*), and HP.

FROGDESIGN

Founded in 1969, frog (www.frogdesign.com) is headquartered in San Francisco, with studios in Austin, New York, San Jose, Seattle, Milan, Amsterdam, Stuttgart, and Shanghai. Certainly one of the best-known resources for design and branding, frogdesign is an independent division of Aricent, a global innovation, technology, and outsourcing company. Aricent is owned by Kohlberg Kravis Roberts & Co., Sequoia Capital, The Family Office, and Flextronics. Clients include Disney, GE, HP (*Photo 4*), Logitech, Microsoft, MTV, Seagate, and Yahoo!

D2M

D2M (Design to Manufacture, www.d2m-inc.com/) is a full-service product development consultancy founded by entrepreneur Andy Butler in 1994. Andy was CEO of a startup at the time and was frustrated by the fact that most firms lacked the experience of developing products in the



PHOTO 3: Ideo Mobility platform videos for Intel.



PHOTO 4: Frog design HP Touchsmart IQ500.



PHOTO 5: D2M Kerbango Internet radio (Kerbango by 3COM).

“real world,” so he decided to start his own! D2M now operates offices in Silicon Valley and Hong Kong. Their focus is to be a total turnkey solution for their medical device, consumer electronics, and green technology clients. To accomplish this, D2M has a breadth of capabilities including business strategy, industrial design,

mechanical, electrical, software, and manufacturing engineering. The Hong Kong office excels at vendor selection as well as a production start-up and ongoing production support. Where many firms are focused on innovation through creativity, D2M has differentiated itself by developing a process that is based on innovation

through both creativity *and* deep technical solutions. They achieve this by having some of the industry’s best mechanism, audio, and video talent as employees. D2M’s clients include Intel, 3M, Siemens, Sun Microsystems, SolFocus, Black & Decker, and Viewsonic. MP

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