



Ay, There's the Hub The lowdown on those little circles that keep CDs in their place

BY PAUL LUKAS

"IF SOMEONE HAD TOLD ME BACK IN 1982 that there'd eventually be over 100 versions of this little thing, I'd have thought they were crazy," says Paul Gilardi, a Maine-based mechanical engineer who's one of the leading designers of recorded media packaging.

"This little thing" is the raised plastic nub at the center of a CD or DVD package tray—the node that the disc is mounted upon. Classically inconspicuous, seen and used by all but truly noticed by just a few, this modest design element goes by a wide range of names—hub, rosette, post, button, spider, spindle—and comes in an even wider array of styles.

How wide? To get a sense of it, pull a dozen CDs off your shelf. You'll likely find at least five or six different hub designs, many with elegantly floral or crystalline forms. Once you start noticing the variations, it's tough to stop hunting for more. Indeed, it's hard to say which is more amazing: that such a simple element comes in so many versions, or that none of those versions has taken hold as the industry standard.

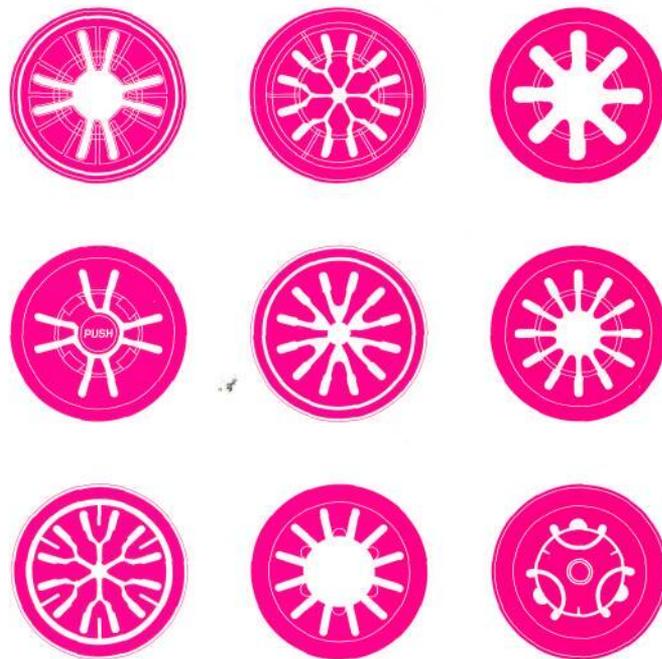
Hubs are not the stuff of hubbub—there are no hub-specific Internet sites, trade magazines, or design conferences. Most of the dozen or so recording industry professionals and musicians interviewed for this article—including several who regularly communicate with CD manufacturers—said something along the lines of, "Oh, that thing? I never really thought about it before. We just take whatever version they give us." Some said they'd never even noticed there was more than one version.

So what accounts for all the diversity? Economics and patent law, mostly. "When someone designs a jewel case, they patent their hub design," explains Darius Van Arman, president of Bellwether Manufacturing, an Indiana company that assembles CD and DVD packages. "So if someone else wants to get into the business, they either have to pay a licensing fee or else come up with their own design. And financially, it's not an option to pay a fee on a commodity item like a jewel case."

Jewel-case economics often come down to fractions of pennies, so most manufacturers prefer to avoid licensing fees by inventing their own hubs. "Every time you bring out a new product, you think about the hub," confirms Shelli Kaiser, executive marketing director for Nexpak, an Ohio manufacturer of packaging for music and movies. "You toy with new designs until you end up stumbling upon one you really like. So you make sure it's not infringing on someone else's patent, and then you go get your own patent." Nexpak has devised over 20 proprietary hub designs. And, as Kaiser notes, "Everyone who manufactures [digital] media—there are about half a dozen primary ones in the U.S., and many more overseas—has similar hub evolutions."

The first hub on the American market, patented by Dutch electronics giant Philips, appeared in the early '80s. That version, with 12 petals (you know, the little teeth that always break, so the CD eventually falls out whenever you open the case), is still the default option for most black or solid-colored polystyrene disc trays. Because clear plastic is more brittle, the hubs on clear disc trays show more variety, as designers have tried a wider range of solutions to avoid breakage.

Gilardi, the mechanical engineer, worked on that early Philips package and has since patented half a dozen hub designs of his



CD hub designs are almost as distinctive as snowflakes.

own. "You want the disc to be mounted solidly enough to stay in place, but not so solidly that it becomes difficult to remove," he says. On most CD packages, he adds, hubs hold discs motionless, while DVD hubs allow discs to rotate. "That's because DVDs spin much faster than CDs when they're played, so the tolerances are much tighter," he explains. "One big industry concern was that if the hub held the DVD too firmly, it might cause deformation of the I.D. [the digital coding on the disc's inner rim]. So DVD hubs are designed to eliminate the pressure of the petals against the inner edge."

A few downscale hubs have also crept into the market, sometimes to the delight of low-budget designers. When Mean Corner, a self-described "sissy-pop" band from New York, recently decided to create homemade packaging for their CD, they found that many vendors offer transparent peel-and-stick hubs made of soft, flexible plastic. "We made a template, so we could stick them in the center of our cardboard panel," says Emily Pugh, the band's drummer. "Occasionally we'd mess one up, so we'd say, 'Well, that'll be a collector's edition.'"

Will there ever be a definitive, ubiquitous hub? "I think it'll continue to evolve, probably in ways we never expected, because the packaging product continues to evolve," Gilardi says. And will anyone notice? "Probably not," he concedes. "It's important within the very narrow universe it lives in. But to the consumer, it's mostly inscrutable." ✦

Paul Lukas, author of Inconspicuous Consumption: An Obsessive Look at the Stuff We Take for Granted (Three Rivers Press, 1997), specializes in writing about the picky little details of just about everything.