

I.D.

40

Transformative Design Projects

*And the people behind them**



*Like the Dutch design laboratory Supermaker, page 60



Set in Stone

Jabra's pared-down headset is as simple as a pebble.

The Jabra Stone looks unlike any other Bluetooth headset, because it's been stripped of the most obvious part: the mike. As its designer, Johan Birger, points out, ear loops have always been an also-ran in the design of headsets, tacked on when everything else is finished. What if the ear loop itself became central to the design? That's what his team developed, dubbing it the "sweep."

But the unique approach posed several challenges. "We struggled for months to get the production quality up," says Birger. The inside surface, made of rubber, has a softly textured feel; the outside is a hard plastic coated in metallic paint. Like half

of a Möbius strip, each surface twists 90 degrees while tapering dramatically from the thumb-size speaker and microphone housing to a fine, rounded point behind the ear.

The Stone's compact shape also necessitated some tricky engineering. With the mike so far away from the user's mouth, noise inevitably creeps in. The engineers had to compensate with another tiny mike, pointed backward, to monitor background noise. Signals from that mike tell the noise-filtering software what to strip out from the voice inputs.

The tiny case also required a tiny battery. Rather than making the earpiece chunkier to accommodate a bigger power source, Birger's team created a charger that doubles as a carrying case. It stores enough power to charge the headset three times without being plugged back in. Plus, it's shaped like a pebble to fit easily in your pocket. www.jabrastone.com —CLIFF KUANG

Growth Potential

SolidThinking's new CAD software brings its users' designs to life.

SolidThinking 8.0 opens like all CAD software: an empty application window framed by a panel of runic icons. With a couple clicks of the mouse, a user can conjure up, say, a featureless gray club chair. But add a few force vectors pressing weight down into the chair and onto the seat back, then activate SolidThinking's new Morphogenesis feature, and a combination of simple geometric solids transforms into a bent and twisted organic mesh.

Drawing on computational models used by doctors for joint replacements and engineers for aircraft wings, Morphogenesis produces digital renderings that project the ways certain forms behave under stress—like how a bone grows denser when under more pressure. Designers and engineers can use the software to develop new biomimetic forms or test the strength of existing shapes. Alex Mazzardo, vice president of product strategy, says SolidThinking's objective isn't to supplant the designer but merely to offer a set of possibilities: "The software takes the designer's idea and asks, 'What would nature do?'"

www.solidthinking.com —IAN VOLNER

