

## A Chip for Every Child?

**T**hink of it as a bar code for your pet. It's the Trovan electronic identification tag: a miracle of technology similar to Destron's LifeChip, it measures about 1 centimeter long and just a few millimeters in diameter. Implanted under the skin with a simple, hand-held tool, each chip contains a unique, 64-bit identification code, readable at a distance of about a foot. And, because the chip is passive (meaning, it works without batteries), it'll last as long as your pet does.

For US\$25 (lifetime charge) and a veterinary cost, you can store your pet's identification code — as well as your name, address, and phone number — in a national database operated by InfoPet Identification Systems Inc. of Burnsville, Minnesota. Organizations like the ASPCA in New York City, San Diego County in California, and the cities of Minneapolis and Saint Paul, Minnesota, are buying readers. So if you lose Fido in one of these locales, there's a pretty good chance you'll get him back.

But why stop with pets? InfoPet markets the implantable transponder for pigs, sheep, cows, and horses. Besides being computer-readable, the chips are less painful than the ear-tags, brands, or tattoos they replace. Even better, a trained farmer can implant more than 200 animals in an hour.

Animate objects are by no means the limit. According to Trovan's distributor, Santa Barbara-based Electronic Identification Devices Ltd., the Australian Wool Corporation has used the system to identify bales of wool, while, in England, Yamaha dealers will happily chip your motorcycle. For less than UK£65 (about US\$100), you can have an ID chip implanted into your bike's frame, wheels, tank, and seat. If the bike is stolen or stripped, the parts can still be tracked.

Of course, the burning question is, What about people? There would be no technical problem,

says Barbara Masin, director of operations for Electronic Identification Devices, in implanting the chips in humans. But to avoid a public relations nightmare, the Trovan dealer agreement specifically prohibits putting chips under the skin.

That dictum hasn't slowed innovation one bit, however. In Australia, explains Masin, one nursing home gives each of its patients a bracelet equipped with a Trovan chip. As the patients walk through a reader installed at the door of the hospital, each ID code is automatically scanned. If, say, an Alzheimer's patient wanders outside, an alarm sounds. But if a patient with walking privileges passes through the same door, the alarm remains silent. Impressed with the results, a few prisons are also looking into the Trovan system, Masin claims, though she declines to say which ones.

The Trovan system is showing up inside identification tags as well. At least half a dozen European ski resorts are putting chips inside lift tickets. Electronic Identification Devices also recommends hiding them in parking passes, meal cards, amusement park passes, club identification cards ... but what a pain carrying all those cards around. Wouldn't it be far simpler to implant a chip into your shoulder, and be done with it? Stay tuned.

— *Simson Garfinkel*  
[ORIGINAL STORY IN WIRED 1.6, PAGE 114.]

### E-cash in the EU

E-cash has just hit the beaches of the European Union. Mondex, a new e-cash smart card developed in London by collaborators NatWest, Midland Bank, and British Telecom, recently announced the launch of pilot programs in both Canada and Great Britain. The British trio spread the electronic gospel of green in the UK in July, while two early adopters — The Royal Bank of Canada and The Canadian Imperial Bank of Commerce, the largest banks in Canada — will introduce the Mondex e-cash scheme in mid 1996. Still to come: Bell Canada will come on board in '96, while Canada's national Mondex rollout will hit sometime in '97. Can the US be far behind?

[ORIGINAL STORY IN WIRED 2.12, PAGE 174.]



### Robbing the Net

A new amendment addressing online pornography was tabled on June 12 in Washington, DC. Some say Amendment 1271 to the US Senate telecom reform bill, authored by Senator Charles Robb (D-Virginia), is yet another attempt to centralize the uncentralizable.

Robb's system would request adult content providers to voluntarily tag or label their sites. The tag would be read by gated-entry software sold only to adults: enter your secret password, and you'd be in. There will be no legislation or enforcement mechanisms attached to this amendment — but, in a year's time, the General Accounting Office will conduct a study to see whether or not the system has been widely used. If the answer is no, might legislation then be put into place? According to Patrick Lavigne, Robb's press man, "The senator has never considered that as an option."

[ORIGINAL STORY IN WIRED 2.11, PAGE 120.]



### A Charged Issue

Though many are scared shitless about it, electromagnetic fields are supposedly not a cause of cancer. This is according to The American Physical Society, the nation's leading group of physicists. Supporting an assessment of studies done by David Hafemeister, a physicist attached to California Polytechnic State University in San Luis Obispo, the society concurs that the annual cost of dampening US

power line fields is money ill spent. Literally billions of dollars are involved in shielding and moving lines that emanate fields of from 5 to 40 milligauss (gauss being the standard measure for magnetic field strength). This measure is a minute fraction of a much greater force we're exposed to every moment of every day — namely, the Earth's own inescapable magnetic field, weighing in at about 500 milligauss.

"In this century," points out Robert Park, a spokesman for the society, "the consumption of electricity has increased about a thousandfold; yet, there has been no statistical increase in cancer" in the population. Even so, many citizens remain skeptical of the safety of power lines and are demanding caution rather than a blind rush into possible risk. The battle rages on.

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BACKGROUND: STAN GAZ; TOP TO BOTTOM: EUGENE MOSIER, SIFFER SPENCE, EUGENE MOSIER