

A Black Box for Your Car

In May 2001, Lumidigm entered into a partnership with Springfield MA-based Smith & Wesson. According to Kevin Foley, Smith & Wesson's VP of product engineering, light print technology is currently the only biometric they are seriously considering for their new "authorized-user-only handgun" (popularly known as a "smart gun," a term that Foley disavows, claiming that a gun can never be any smarter than the person shooting it).

Smith & Wesson is developing a weapon in which an electronic firing system—including a biometric authorization system—replaces the mechanical one. The company had considered fingerprint technology and rejected it, not only because of the computing power required but also because fingerprinting is less effective for some demographics. But with light print, "if you have skin, you can use it," says Foley. The technique also does not require exact placement of the skin, so, for example, gripping the handle of the gun in slightly different ways won't compromise accuracy. Foley believes that Smith & Wesson will complete an electronic-gun prototype incorporating Lumidigm's technology by early 2004.

Additionally, this gun would be virtually impossible to foil—a problem with many biometric technologies. According to Richard Norton, executive director of the Washington D.C.-based International Biometric Industry Association, "somebody's always trying to prove that you can spoof a particular system." Last May, a Japanese researcher stunned a biometric conference when he revealed that he had duped 11 different security systems by lifting and then applying finger prints with a substance similar to gummy bears.

"I think this was slightly overblown," Norton says, "but the point is that fingerprint technology cannot determine 'liveness.' You can't foil the Lumidigm system with fake or dead tissue."

Lumidigm's technology will never be able to identify someone out of a crowd in the same way that face—and to a lesser extent, gait—recognition—can (see <u>Walk this</u> <u>Way</u>, April 23, 2002). But as Rob Rowe and his team continue to fine-tune their technology, handguns and other firearms may soon be considerably less dangerous and accident prone.

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