

## Holographic Images Of The Body Ideal For Security, Fashion

Pacific Northwest Natl Lab



With airline security in mind, Pacific Northwest National Laboratory (PNNL), a federal research facility in Richland, Wash., developed its Millimeter Wave Holographic Body Scanner technology in the late 1980s. Researchers Doug McMakin, Tom Hall, James Prince, Ron Severtsen, and Dave Sheen invented the device, which creates holographic images of the body ideal for detecting hidden weapons or explosives.

The body scanner relies on millimeter wave array/transceiver technology to create the image. A person stands within the portal-like scanner and is illuminated with low-level millimeter waves, a type of harmless radiation. The radiation penetrates clothing and is reflected off the body. The signals are captured, transmitted to a high-speed image processing computer, and converted into high-resolution, three-dimensional images. PNNL recently licensed this technology for use in the private sector.

SafeView, a California-based technology company, utilized the technology in its Scout™ Personnel Screening System. In 2006, SafeView was purchased by L-3 Communications, an international company specializing in security and

military intelligence.

“ *In the contrasting world of fashion, PNNL’s body-scanning techniques are being used by Intellifit, a Pennsylvania-based company that adapted the technology for the fashion industry.*

In 2003, the company worked with PNNL to design a portable scanner for calculating body measurements.

Distributed in malls and retail stores around the country, Intellifit scanners provide fully clothed clients with their exact body measurements in about 10 seconds.

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