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The Terahertz technology

This is like a sci-fi movie ("Total Recall" is the first example that comes to my mind) scene becoming reality, making one of our naughty dreams come true! While our regular sun glasses help us take quick peeks at the hot girls around us without them even noticing it (or so we like to think), this new technology breaks the limit. The invention is not only for kinky individuals. The new technology would also allow security agents to spot from a distance a weapon hidden in the coat of a terrorist, before this one realizes he's been discovered. The new technology could be soon delivered by Advance Technology Center, the research laboratory of the British company BAE Systems and it is based on a tiny segment of the radio wave spectrum: the Terahertz band. These waves have a frequency between that of the radar microwaves and the infrared waves. At 1.000.000 megahertz, they are invisible and do not affect the eye. Unlike X rays, the Terahertz waves are able to detect from far away objects that are hidden under the clothes or packaging materials. The results of the first tests are amazing. Hidden behind a screen, the researchers were able to see the people as if they wore no clothes. The technology would be used for future applications not only in the anti-terrorist defense systems, detecting weapons, explosive and toxic chemicals, but also in the medical field, these waves being able to detect skin cancer and tooth decay earlier, and to fight against drug trafficking. The terahertz technology for screening devices has been investigated also at Sandia National Laboratories, a National Nuclear Security Administration (NNSA) laboratory. "We believe it will find applications in advanced communication systems and high-resolution radars," said Mike Wanke, principal investigator at Sandia. "Most materials and chemicals have their own unique terahertz spectral signatures. A terahertz transceiver system would be able to measure, for example, the signature of a gas and determine what it is.", he added. The technology could also be used by astronomers, as it can detect chemicals in the nebula and planetary atmospheres.