



Flexible, transparent imaging device developed

Vienna: Austrian researchers have developed an entirely new way of capturing images based on a flat, flexible, transparent and potentially disposable polymer sheet.

The new imager, which resembles a flexible plastic film, uses fluorescent particles to capture incoming light and channel a portion of it to an array of sensors framing the sheet.

With no electronics or internal components, the imager's elegant design makes it ideal for a new breed of imaging technologies, including user interface devices that can respond not to a touch, but merely to a simple gesture, the journal Optics Express reports.

"To our knowledge, we are the first to present an image sensor that is fully transparent -- no integrated microstructures, such as circuits -- and is flexible and scalable at the same time," says Oliver Bimber of the Johannes Kepler University Linz in Austria, who co-authored the study.

The main application the researchers envision for this new technology is in touch-free, transparent user interfaces that could seamlessly overlay a TV or other display technology, according to a Kepler statement.

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