Panoramic Camera with High Resolution Imaging System for Surveillance and Security CCTV Systems

Traditional close circuit television security cameras have a limited field of view, which enables an individual to avoid surveillance as the camera scans the area. Panoramic cameras are able to capture a wider field of view but at the cost of low resolution. This technology combines a wide-angle lens with a narrow angle lens to produce high-resolution video of areas of interest. With this technology powerful security and surveillance systems can be developed.

Image Detection Allows for High Resolution Zoom for Accurate Surveillance

While traditional wide-angle images compromise on image resolution, this technology includes a second imaging system to generate high-resolution video. This technology uses a wide-angle lens to capture a panoramic view of a scene being monitored. Specific regions of surveillance interest are determined by a motion detection system. The narrow lens imaging system then uses pan tilt zoom view adjustments to focus and highly resolve the region of interest.

A prototype of the technology has been tested and been shown to produce high-resolution video footage.

Lead Inventor:

Shree Nayar, Ph.D.

Applications:

- Surveillance and security monitoring for private residences
- Surveillance and security monitoring for commercial and public buildings
- Military reconnaissance

Advantages:

- Panoramic video footage for continuous monitoring of full scene
• High resolution imaging of regions of interest
• Automated image detection

**Patent information:**

Patent Pending (US 6,215,519)

Tech Ventures Reference: IR MS97/10/22

**Related Publications:**


**Inventors**

Shree Kumar Nayar