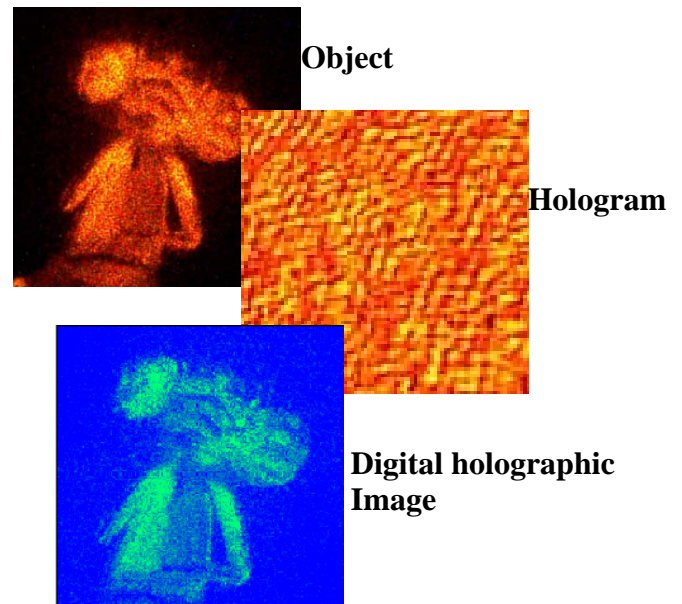


LICENSING OPPORTUNITY

NEW

Wavelength Scanning Digital Interference Holographic Microscopy

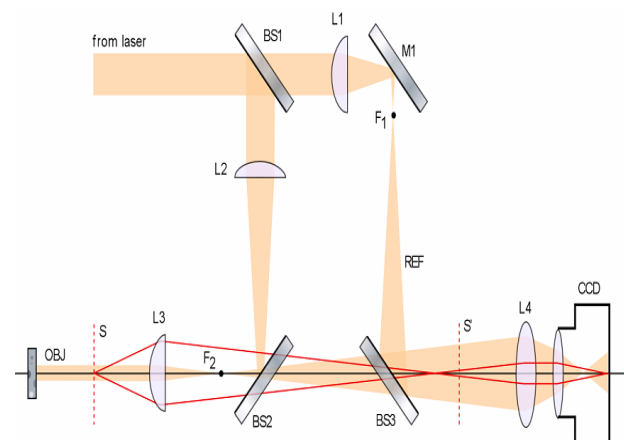
Techniques of imaging microscopic objects are applicable in many areas of science and technology including biology, medicine, materials science, microelectronics engineering, geology etc. A novel digital holographic method has been developed. It allows for reconstruction of 3D objects with very narrow depth of focus and high axial resolution. It allows complete suppression of out-of-focus images. A number of optical holograms are generated using different wavelengths spaced at regular intervals. They are recorded by a digital camera and reconstructed applying numerical methods. Experiments are being conducted to test the technique for sub-surface imaging. The technology is also effective for correction and scale distortion, arbitrary section, cut-away views, automatic feature enhancement and identification etc.



Single Wavelength Hologram

TECHNOLOGY HIGHLIGHTS

- Simple, versatile and novel technique
- Produces sharper images with almost no wavelength mismatches
- Micron resolution in both lateral and longitudinal directions
- A digital system with no mechanical moving parts
- Capability of sub-surface imaging
- Numerous applications



Digital Holography Apparatus

TechID 99B034