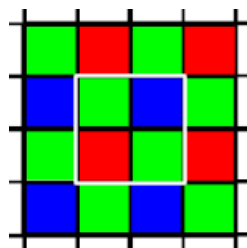
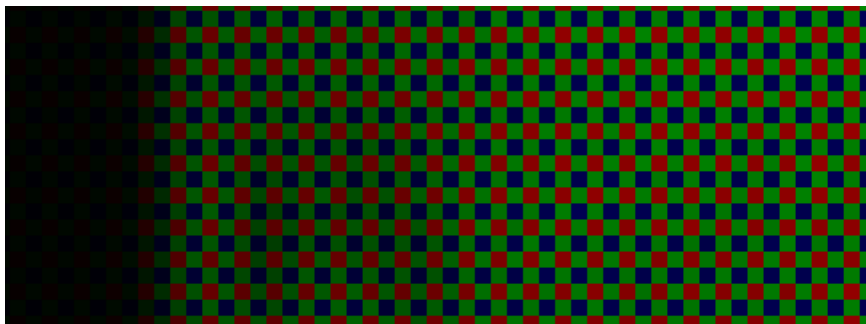
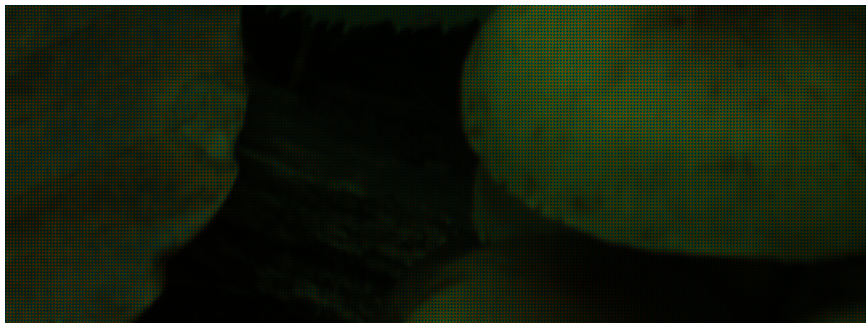
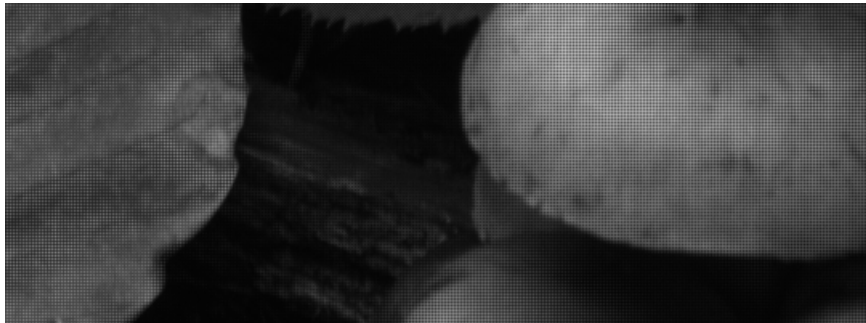


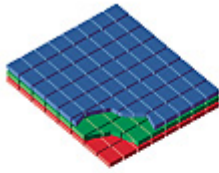
Bild-Pixel-Lüge



BAYER-Maske

FOVEON-X3 CMOS CHIP

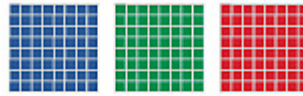
Foveon X3[®] Capture



A Foveon X3 direct image sensor features three separate layers of pixels embedded in silicon.

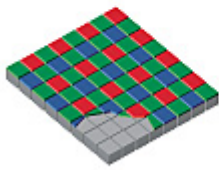


Since silicon absorbs different colors of light at different depths, each layer captures a different color.

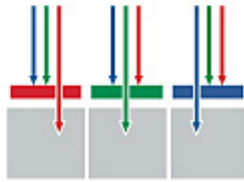


As a result, only Foveon X3 direct image sensors capture red, green, and blue light at every pixel location.

Mosaic Capture



In conventional systems, color filters are applied to a single layer of pixels in a tiled mosaic pattern.

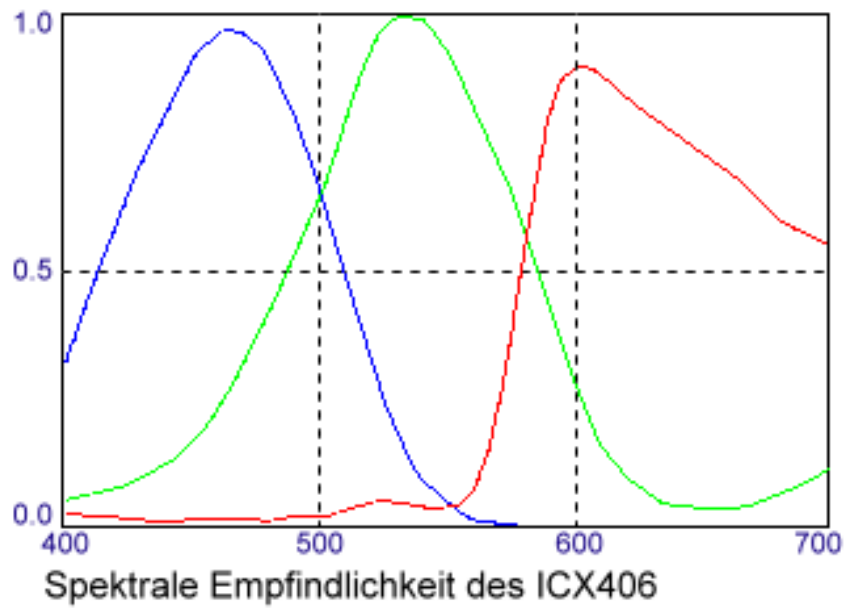
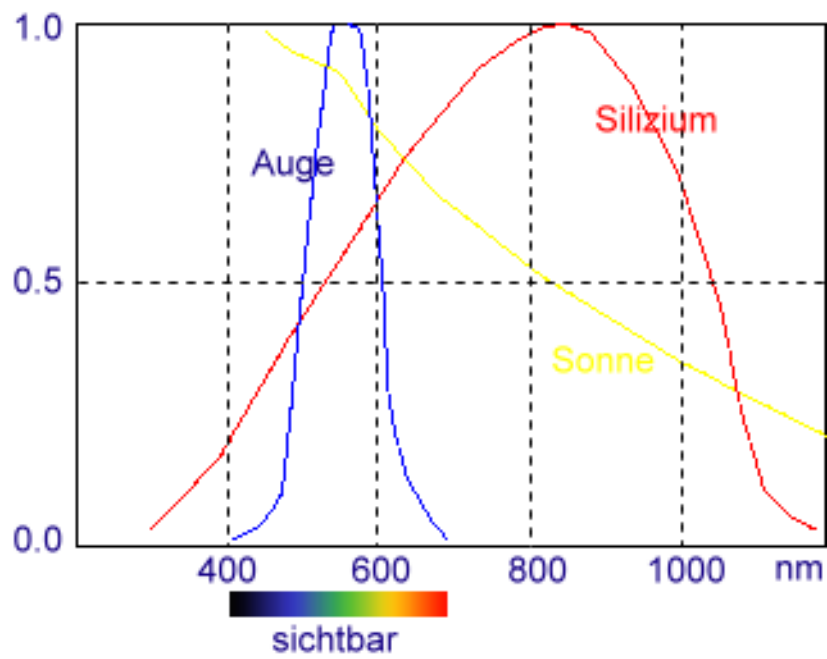


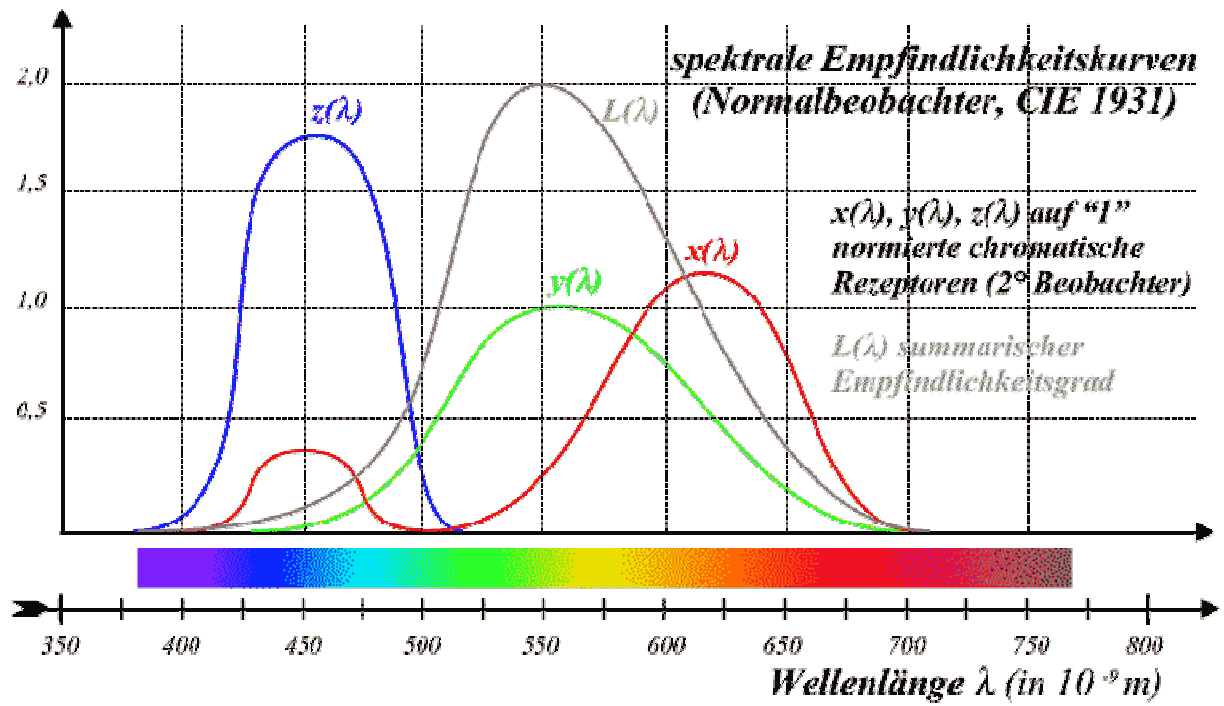
The filters let only one wavelength of light—red, green, or blue—pass through to any given pixel, allowing it to record only one color.



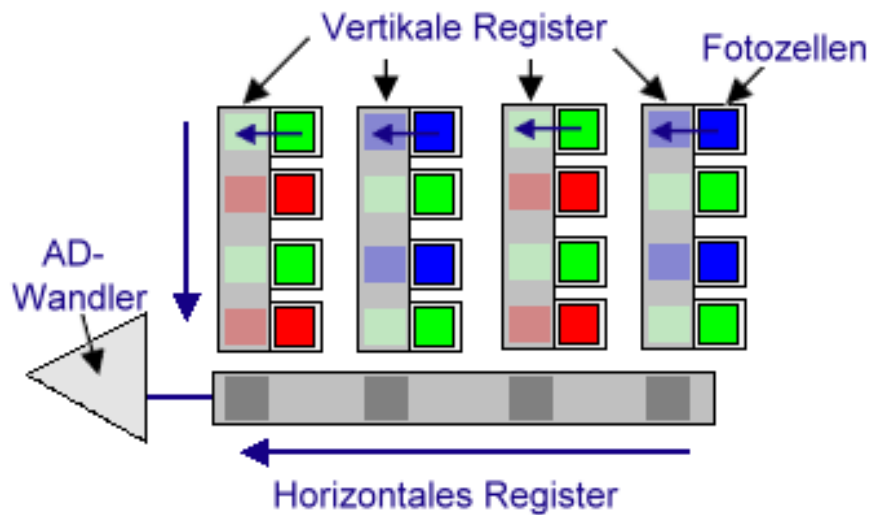
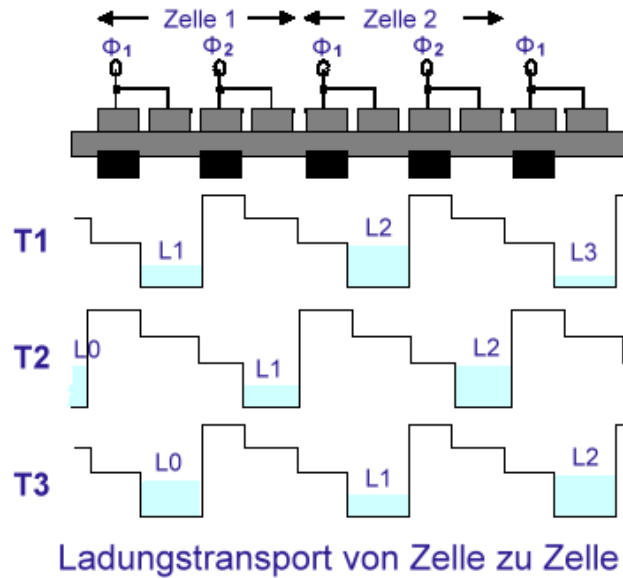
As a result, mosaic sensors capture only 25% of the red and blue light, and just 50% of the green.

Auge vs. Silizium





CCD – Charge-Coupled – Device



Bauformen von CCD-Sensoren

Full-Frame-CCD-Sensor (mech. Verschuß) / Frame-CCD-Sensor (50:50)
 Interline-CCD-Sensor (mit oder ohne Sammel-Linsen)