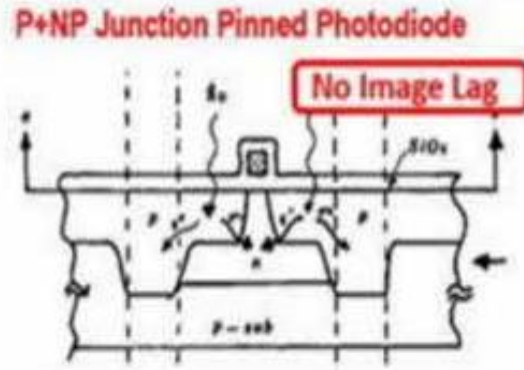
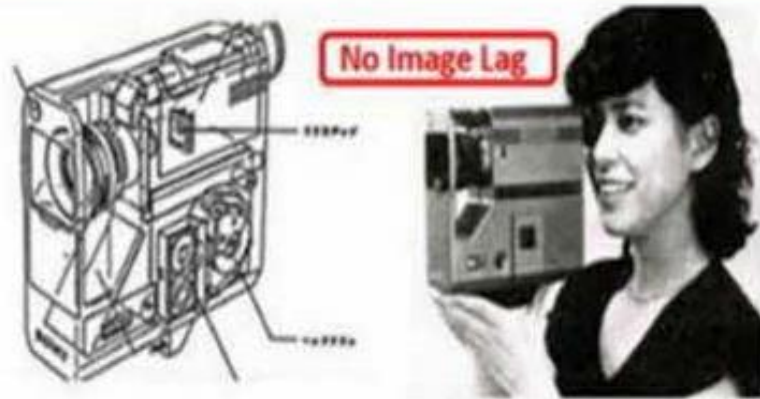


Story of Pinned Photodiode

The First Pinned Photodiode was developed and reported at the SSDM1978 Conference held in Tokyo, September 1978 by Yoshiaki Hagiwara at Sony.

Sony original 570H x 498 V one-chip FT CCD Image Sensor with Pinned Photodiode, July 1980



On July 1980, Iwama Kazuo at Sony Tokyo Press Conference and Morita Akio at New York Press Conference announced the one chip CCD video camera with the 8 mm VTR in one box.

See the Original 1978 Publication of the Pinned Photodiode Sensor

Y. Daimon-Hagiwara, M. Abe, and C. Okada, "A 380Hx488V CCD imager with narrow channel transfer gates," Proceedings of the 10th Conference on Solid State Devices, Tokyo, 1978; Japanese Journal of Applied Physics, vol. 18, supplement 18-1, pp. 335-340, 1979

High quality picture of SONY CMOS Imager is also based on SONY HAD (Pinned Photodiode).

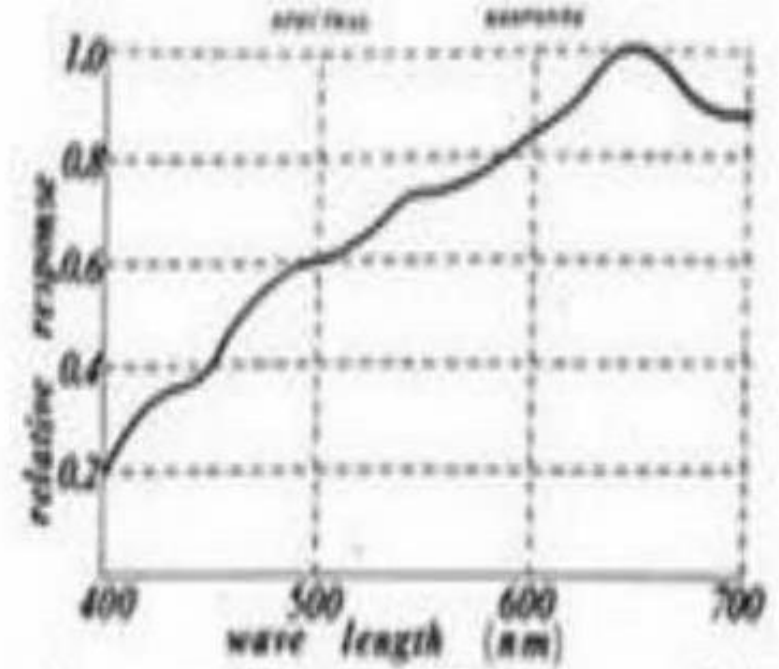


Figure 13 Spectral Response of the P+NP junction Pinned Photodiode (PPD) with the excellent blue light sensitivity