## Artificial Intelligent Partner System(AIPS) Home Page Top hagiwara-yoshiaki@aiplab.com

Hello, my name is Yoshiaki Hagiwara. I am also called simply as Yoshi, and as Yoshiaki Daimon and also as Yoshiaki Daimon-Hagihara. I believe that I am the true inventor of the digital camera with the mechanical shutter function capability, which is completely filmless and free from mechanical parts. I worked at Sony from 1975 till 2008. My friends in Sony developed the digital camera in 1987. Sony is now enjoying image sensor business. Image sensors are very important to realize Artificial Intelligent AI robots and self-driving cars.



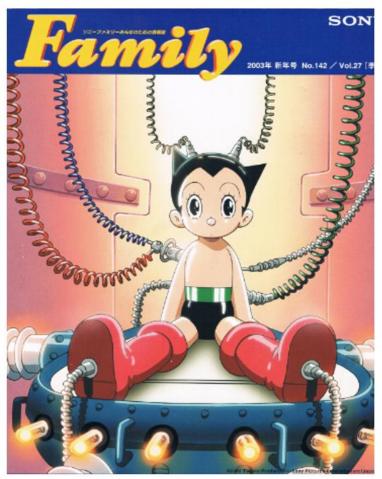
Evidence that Yoshiaki Hagiwara is the inventor of Pinned Buried Photodiode with in-pixel overflow Drain (VOD) function is given by the three basic Japanese Patent Applications, JPA1975-127646, JPA1975-127647 and JPA1975-134985.

Hagiwara also invented the in in-pixel Overflow Drain (OFD) Punch-thru Clocking Scheme to realize the completely-mechanical-part-free Electrical Shutter for digital cameras, opening a way to realize our modern digital TV world.

Evidence that Yoshiaki Hagiwara is the inventor of Electrical Shutter is given by the basic Japanese Patent Applications, JPA1977-126885.

The first Double Junction Pinned Buried Photodiode was developed by Hagiwara team at Sony in 1978. The first Triple Junction Pinned Buried Photodiode with Electrical Shutter function was developed by Hamazaki team at Sony in 1987.

Yoshiaki Hagiwara joined Sony in Feb 1975 to build Artificial Intelligent Partner System(AIPS), which includes Artificial Intelligent Robot System, Artificial Intelligent Self-Driving Car, and Artificial Intelligent Vision Sensor System. His first work was developing the CCD image sensors. Hagiwara Team at Sony in 1989 developed 4M Cache SRAM for SNAPSHOT picture acquisition which opened a way to build the digital camera system. Hagiwara is also the inventor of the electrical shutter of the digital camera system.



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Yoshiaki Hagiwara was born on July 4, 1948 in Kyoto Japan. Graduated from Murasaki-no **Elementary School in 1958. Lady** Murasaki Shikibu is very famous as the writer of the story of Genji. Graduated from Rakusei Middle High School in 1961. Moved to Riverside-city in California USA in 1965 and graduated from Riverside **City Polytechnique High School in** 1967. Lived in Pasadena California since 1967 and received BS1971, MS1972 and PhD1975 in Electrical **Engineering and Physics from California Institute of Technology** (Caltech). Joined Sony on February 1975 till July 2008. Taught at Sojo University as a professor till 2017. He is now serving for the ssis.or.jp.