

OBITUARY

# Bayer, digital imaging pioneer at Kodak, dies

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Bryce Bayer, a former Eastman Kodak Co. researcher considered by many the "father of digital imaging," died Nov. 13 in Bath, Maine. He was 83.

In 1974, Bayer developed a method for capturing a highly detailed color image with a single sensor, technology that came to be known simply as the Bayer filter.

His innovation mimicked the way the human eye perceives color, arranging a series of sensors into a checkerboard pattern. The Bayer filter, patented in 1976, is used in nearly every digital camera, camcorder and smartphone on the market today.



Bryce Bayer

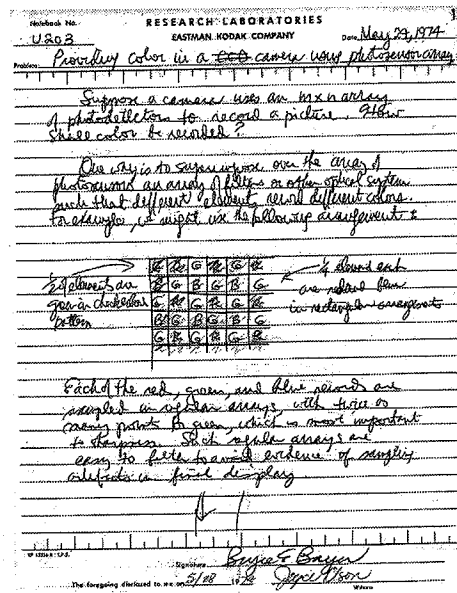
His work helped pave the way for the development of the first working digital camera a year later. Steve Sasson, the Kodak engineer responsible for that step forward, said that Bayer's contributions were not only pioneering but prophetic.

"We weren't even thinking about digital cameras in those days," Sasson recalled. "Bryce was trying to figure out how to capture color with a two-dimensional array of color-blind sensors, and that turned out to be one of the foundations of digital imaging. He was solving a fundamental problem before that problem was even upon us."

"Bryce has always been a hero for me," Sasson added.

That sentiment was echoed by Ken Parulski, who received more than 200 digital imaging patents during his career at Kodak.

"I feel very lucky to have worked with Bryce, starting on my very first



This page from Bryce Bayer's lab notebook shows his 1974 breakthrough design for a color filter array, which came to be known as the Bayer filter. PROVIDED IMAGE

day at Kodak," Parulski said. "Bryce was so modest and unassuming, it took me years to realize what a genius he really was."

Parulski said that Bayer's invention is the key reason we have cameras that are compact yet provide sharp-looking pictures. "Though few people in Rochester have heard of Bryce, his name and invention is a household name to everyone who designs digital cameras or camera phones," he said.

In addition to his work on digital color imaging, Bayer developed a number of technologies for storing and processing digital images. He retired from Kodak in the mid-1990s.