IEEE Andrew S. Grove Award

This award is named in honor of Andrew Grove's lifetime achievements, including helping to found Intel Corporation. This award is presented for outstanding contributions to solid-state devices and technology.

The award is presented by the IEEE Board of Directors on the recommendation of the Technical Field Awards Council and the Awards Board. It may be presented to an individual or team up to three.
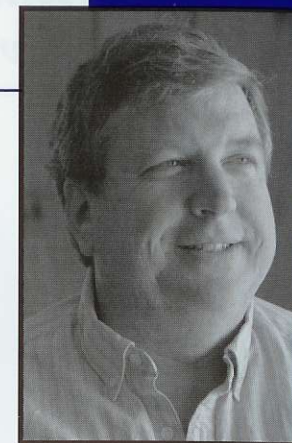
For additional information on IEEE Technical Field Awards and Medals, to view complete lists of past recipients or to nominate a colleague or associate for IEEE Technical Field Awards and Medals, please visit http://www.ieee.org/awards.

Past recipients:
2008—Stefan Lai
2007—James D. Plummer
2006—Chang-Gyu Hwang
2005—Tso—Ping Ma
2004—Krishna Saraswat
2003—Mark Bohr
2002—Dimitri A. Antoniadis
2001—Al F. Tasch
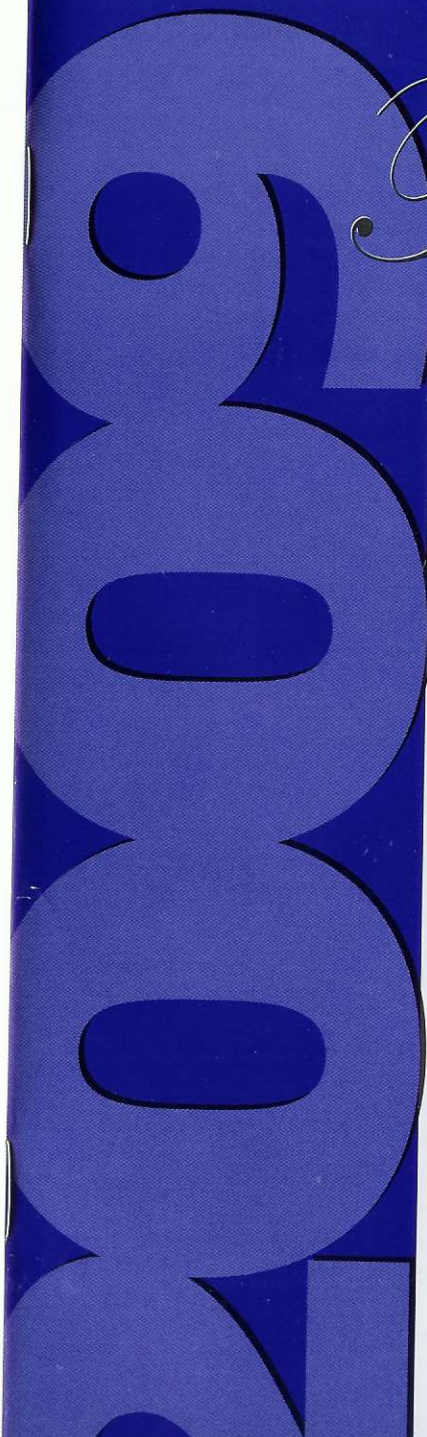2000—Wolfgang Fichtner

Eric R. FOSSUM

2009

"For significant contributions to the invention, development and commercialization of CMOS image sensors"

Eric R. Fossum's development of the active pixel image sensor based on CMOS technology has had a profound effect on digital photography, enabling and improving applications such as Web cams, cell phone cameras, high-end digital cameras, high-speed machine/medical vision systems and automotive cameras. As an alternative to the charge-coupled device (CCD) sensor, Dr. Fossum's CMOS active-pixel sensor took advantage of shrinking design rules and adapted successful CCD signal processing techniques to put an amplifier on each pixel of the image sensor to yield a high-quality image. Other advantages include better speed, reduced size and less power consumption, which made it favorable for consumer devices. He co-founded Photobit Corporation in 1995 to accelerate the technology's commercial use, and in 2001 the company was acquired by Micron Technology, one of the world's largest suppliers of image sensors for mobile applications. An IEEE Fellow, Dr. Fossum holds 119 U.S. patents and is currently a consultant for the Samsung Electronics Semiconductor Research and Development Center, where he leads a team of researchers in advanced imaging sensors.

IEEE

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Eric R. Fossum

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Nominations for IEEE awards and recognitions are initiated by the members and others, then reviewed by a panel of peers—professionals who are especially knowledgeable in a particular field. Their recommendations are, in turn, submitted to the IEEE Awards Board for further review prior to final approval by the IEEE Board of Directors. The awards fall into seven categories:

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