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IBM Fellow Stuart Parkin Wins IEEE Daniel E. Noble Award

Honor Recognizes Outstanding Contributions to Emerging Technologies

MADRID, SPAIN and SAN JOSE, CA--(Marketwire - May 7, 2008) - (NYSE: IBM) -- At the [IEEE International Magnetism Conference](#) today in Madrid, [IBM Fellow Stuart Parkin](#) received the [Daniel E. Noble Award](#) for his fundamental contributions to the development of magneto-resistive devices for non-volatile, high density, random access memory. Dr. Parkin's innovations in memory technologies led to the revolution of the hard disk drive industry and are found in nearly every disk drive on the market today.

Dr. Parkin, who received this award jointly with Jim Daughton and Saied Tehrani, was also elected a [member](#) of the [National Academy of Sciences](#) on April 29 and received an honorary doctorate from the [University of Eindhoven](#) in the Netherlands on April 25, [both this year](#).

Most recently, Dr. Parkin, of the [IBM Almaden Research Center](#) in San Jose, CA, has been [in the news](#) because of new developments with his latest work, [Racetrack Memory](#). Racetrack Memory, an entirely new way to store digital information, could lead to computer memory that combines the high performance and reliability of flash with the low cost and high capacity of the hard disk drive.

Racetrack Memory is the latest evolution in the field of [spintronics](#), which uses the spin, rather than the charge, of an electron to create electronic devices. Within the next ten years, Racetrack Memory, so named because the data "races" around a nano-wire "track," could lead to solid state electronic devices -- with no moving parts, and therefore more durable -- capable of holding far more data in the same amount of space than is possible today.

For example, this technology could enable a handheld device such as an mp3 player to store around 500,000 songs or around 3,500 movies -- 100 times more than is possible today -- with far lower cost and power consumption. The devices would not only store vastly more information in the same space, but also require much less power and generate much less heat, and be practically unbreakable; the result: massive amounts of personal storage that could run on a single battery for weeks at a time and last for decades.

In 2005, IBM Fellow David Hareme received the Daniel E. Noble award for the development of the world's first successful silicon germanium technology for analog and communications circuits used in wireless communications equipment, optical network interfaces, GPS and cellular telephones.

About the IEEE Daniel E. Noble Award

The IEEE Daniel E. Noble Award was established by the IEEE Board of Directors in 2000 for outstanding contributions to emerging technologies recognized within recent years.

The award is named in honor of Dr. Daniel E. Noble, Executive Vice Chairman of the Board emeritus of Motorola. Dr. Noble is significantly known for the design and installation of the nation's first statewide two-way radio communications system. The system was the first in the world to use FM technology.

About The National Academy of Sciences

Election to the Academy recognizes distinguished and continuing achievements in original research and is one of the highest honors that can be accorded a United States scientist or engineer.

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