

Eureka moment: IIT-I gets another patent for innovation

Indore: The Indian Institute of Technology (IIT), Indore received a patent for "Offset Compensated Data Sensing Technique for Low Energy Embedded SRAM" from the Patent Office, Government of India. This is the 16th patent awarded to IIT-I amongst 85 patents filed till date. The patented technique will enable the emerging chips to be fast enough to read the data from processor on-chip memory.

It will also increase the accuracy, speed and save energy for data processing in neuromorphic computing chips, low-energy wearable electronics devices, smartphones,

personal healthcare assistants, and smart Cyber-Physical Systems applications, the institute said in a statement released on Monday.

The statement said that

16TH OF INSTITUTE

the invention has led to the development of a semiconductor memory architecture designed for low-energy electronics devices which can tolerate variations in the modern Integrated Circuit fabrication process.

The inventors of the patent are Dr Bhupendra Singh

Reniwal, a Ph.D. holder from IIT, Indore and Professor Santosh Kumar Vishvakarma, faculty, Department of Electrical Engineering at IIT-I.

Reniwal was involved in developing energy-efficient memory architecture and I/O circuit design while Vishvakarma has expertise in research in energy-efficient and reliable SRAM memory design, enhancing performance and configurable architecture for DNN accelerators, SRAM-based In-memory computing architecture for edge AI, reliable, secure design for IoT application and design for reliability. TNN