

The Opportunity

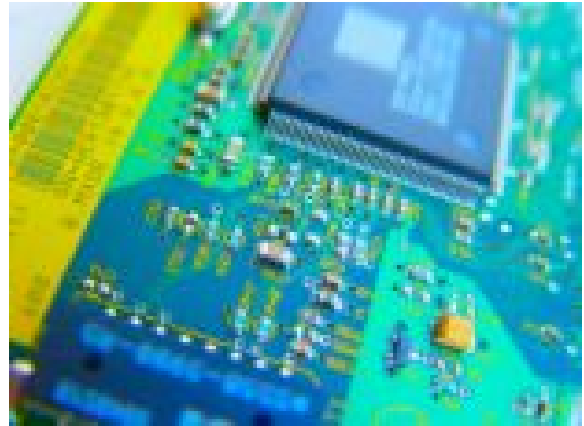
Researchers at the National Institute of Advanced Industrial Science and Technology (AIST) of Japan have developed and patented unique semiconductor and giant magnetoresistance film materials.

These materials capitalize on spin-polarized electronics to enable utility in **data storage** and **quantum communications**.

Intellectual Property

Current U.S. patent protection includes:

US Patent	Title & Features
6,132,524	<ul style="list-style-type: none"> Semiconductor magneto-optical material. Exhibits pronounced magneto-optical effect at room temperature in a desired wavelength region and can be formed as a thin film.
6,610,421	<ul style="list-style-type: none"> Spin electronic material and fabrication method thereof. Unique spin electronic material is a TE-VE zincblende structure, where TE is V, Cr, or Mn and VE is As or Sb.
6,613,448	<ul style="list-style-type: none"> MR effect film with GaAs substrate embedded with MnSb particles that uses the magnetoresistance effect to record and read information or to detect weak magnetic fields. Related to 6,808,740.
6,808,740	<ul style="list-style-type: none"> Magnetoresistance effect film and method of forming same. Exhibits a magnetoresistive effect of 73,000% at room temperature and 4,000,000% at -20 deg C. Related to 6,613,448.



Intellectual Capital

AIST (National Institute of Advanced Industrial Science and Technology) is Japan's extensive public research organization established in 2001. AIST and its predecessors have advanced technology and supported Japanese industries since 1876.

Although not specifically a government institution, AIST is largely funded by the Japanese government.

Comprised of more than 50 autonomous research units in various innovative research fields and employs about 2500 research scientists and well over 3000 visiting scientists.

AIST Home Page:

www.aist.go.jp/aist_e/about_aist/index.html

For More Information

AIST is seeking to license this technology and provide assistance with its commercialization success to qualified organizations.

Consideration will be provided to a range of financial, strategic, and commercial investment options.

Certain circumstances will warrant consideration for nominal funding from AIST.

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