



Tech ID: 11-0015

Contact:

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Status:

Seeking R&D and/or
licensing partner

Patent Pending

Inventor Bio:

Dr. Yang-Ki Hong
Professor

Electrical and Computer
Engineering Department
University of Alabama

Center for Materials for
Information Technologies

Over 100 Publications

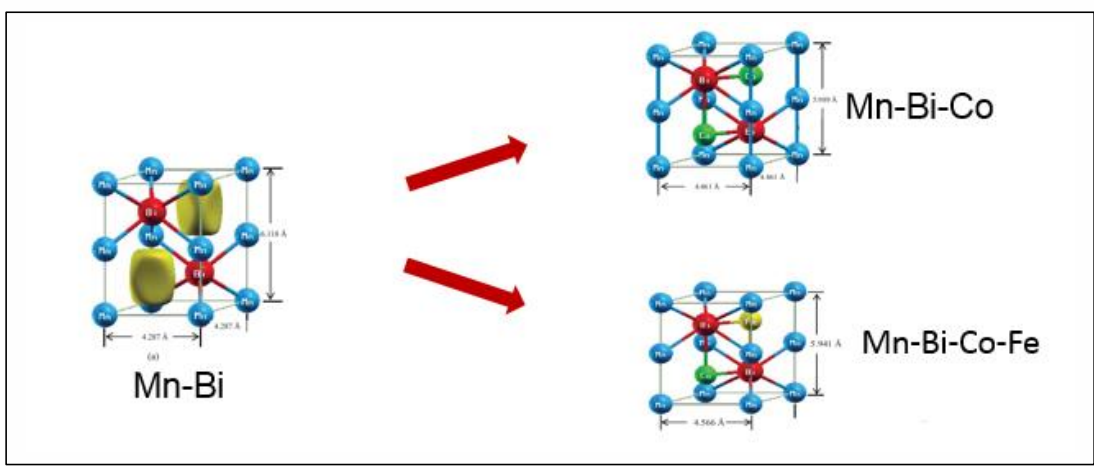
13 Patents Awarded

8 US Provisional Patents

Non-rare Earth Permanent Magnet

Non-rare Earth Permanent Magnet for Electric Motor and Generator Applications

- New alloy magnet that contains no rare-earth metals, but possesses similar magnetic properties as rare-earth magnet
- Composed of a conventional Mn-Bi permanent magnet alloyed with a third element, which could be Cobalt (Co) or a pair of Co-iron (Fe)



Advantages

- Ability to replace the use of rare-earth magnets in high energy magnet products with the inexpensive alloy
- Low magneto-crystalline anisotropy when comparing to the traditionally used rare-earth magnets
- Ability to be magnetized in different directions
- Circumvents PRC's control over the permanent magnet industry

Applications

Engine & Turbine Manufacturing

Electric/Hybrid Automobiles

Electronics

THE UNIVERSITY OF ALABAMA



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