

# mPhase and Bell Labs Announce Milestone in Sensor Development

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## *First Sample of Device Made in New Jersey Nanotechnology Consortium Fab*

mPhase Technologies, Inc. and Bell Labs, the research and development arm of Lucent Technologies, today announced that they have produced the first core components of a sensor package, technically referred to as a magnetometer, that is predicted to be up to 1,000 times more sensitive than commercially-available uncooled sensors used in metal detectors.

These components were produced in the silicon fab line operated by the New Jersey Nanotechnology Consortium (NJNC), a subsidiary of Lucent based at and run by Bell Labs in Murray Hill, N.J.

"Considering that our magnetometer agreement with Bell Labs is less than three months old, we're absolutely delighted about the rapid pace of the development," said Ronald A. Durando, mPhase CEO. "With this step behind us, the team is now ready to engage in discussions with potential partners and users to establish technical specifications for these devices."

The prototype magnetometer has, at its core, a Micro-Electro Mechanical Systems (MEMS) device, which is based on fundamental breakthroughs made in the past few years at Bell Labs, using the NJNC facilities. Acting much like a miniature tuning fork or oscillator, with movements only perceptible under a microscope, it is designed to detect changes in magnetic fields and can be used in applications to establish

direction of movement of magnetic objects.

"The velocity of transition from lab to prototype speaks highly of the NJNC business model, which enables mPhase to leverage Bell Labs' expertise in accelerating the product realization process," said David Bishop, NJNC president and Bell Labs vice president of Nanotechnology.

The magnetometer was the subject of a joint briefing at the NanoBusiness 2005, available as a webcast upon registration at [phx.corporate-ir.net/phoenix.z ... 115986&p=irol-irhome](http://phx.corporate-ir.net/phoenix.z...115986&p=irol-irhome).

Market research indicates that initial applications will be centered on national defense and homeland security, and these are under discussion with early adopters, according to Durando.

The mPhase-Bell Labs collaboration on magnetometers is an outgrowth of a year-old co-development agreement centered on a nanotechnology-based power cell that may serve as a power source for the magnetometers and other applications.

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