

MagneMotion Issued New Patent on Maglev Technology

New MagneMotion Patent Addresses Critical Issue of Lateral Stability

Acton, MA (December 15, 2008) - For Immediate Release

MagneMotion Inc., a developer and manufacturer of Linear Synchronous Motor (LSM) products and systems used in assembly automation, material handling and transportation applications, today announced that it has been awarded U.S. Patent No. 7,448,327 related to the company's development of Magnetic Levitation (Maglev) systems. The patent builds on previously issued Patent No. 6,983,701, which recognizes MagneMotion's use of a single magnetic structure to provide suspension, guidance and propulsion of vehicles on a guideway, eliminating a level of complexity and costs found in other Maglev systems.

The new patent expands on the initial patent in 2 primary ways. First, the magnets in the single magnetic structure are offset, thereby providing lateral stability; and second, control coils are wrapped around the offset magnets to stabilize and maintain the magnetic gap when the vehicle is levitated. When combined, the inventions improve ride quality, reduce the cost of the vehicle and guideway, and simplify the control system. In applications where small vehicles can be deployed, the new invention may eliminate the need for a secondary suspension to provide lateral damping. A secondary suspension would add weight and cost to the vehicle, and would likely increase the height and raise the center of gravity of the vehicle, all of which have negative consequences.

The technology addressed in both patents will be used on MagneMotion's current Maglev development project, which is a cooperative effort with the Federal Transit Administration (FTA) and Old Dominion University (ODU). During Phase I of the project, a 160 foot track will be constructed and tested at MagneMotion's new corporate headquarters in Devens, Massachusetts. During Phase II, a 500 foot track will be built on an existing Maglev guideway structure at Old Dominion University in Norfolk, VA for further testing. The company's design envisions Maglev vehicles that are the size of a van or small bus that can accelerate quickly to a target speed of about 100 miles per hour. The test system will operate at a lower speed as the guideway at ODU is designed for a maximum speed of 40 mph. In spite of smaller-sized vehicles, by having numerous vehicles in operation simultaneously and under constant, accurate control, the system could accommodate a large ridership in specific applications.

"The technology advancement embodied in this patent is put to practical use in our FTA Maglev development program and represents a critical leap from our existing technology demonstration system to a full scale, field-able technology", stated MagneMotion Chairman, CTO and Maglev pioneer Dr. Richard Thornton. "With successful completion of this effort, Maglev technology will be one step closer to realization and practical use in the United States. MagneMotion is proud to be at the forefront of this critical technology development in the U.S. in cooperation with the FTA and ODU", Thornton concluded.

The Maglev test system will be operational at MagneMotion's facility beginning in the summer of 2009. The test system will not be designed to carry passengers at this time.

About MagneMotion

MagneMotion provides Linear Synchronous Motors (LSMs) and advanced transport solutions for high performance assembly, manufacturing automation and transportation systems. MagneMotion's LSM products are used to create systems that are faster, more efficient, and more reliable than conventional technology. The LSM technology is embodied in the company's QuickStick[®] product line, which can accommodate a variety of acceleration, speed, and payload requirements. The advanced LSM technology is a breakthrough and provides significant advantages in powering manufacturing and automation systems, as well as in a new class of shipboard elevators developed for the U.S. Navy. In addition, MagneMotion is developing a new generation of Magnetic Levitation (Maglev) technology. Organization's ranging from the U.S. military and government agencies, to Fortune 100[®] consumer products and pharmaceutical companies, to leading automation systems integrators adopt MagneMotion's technology for superior results.