

MECHANICAL TECHNOLOGY INC  
Form 8-K  
June 21, 2004

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549

FORM 8-K  
CURRENT REPORT  
PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934

June 21, 2004

Date of Report (Date of earliest event reported)

MECHANICAL TECHNOLOGY INCORPORATED

(Exact name of registrant as specified in its charter)

<u>NEW YORK</u>	<u>0-6890</u>	<u>14-1462255</u>
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)
431 NEW KARNER ROAD, ALBANY, NEW YORK 12205		
(Address of principal executive offices) (Zip Code)		

(518) 533-2200

(Registrant's telephone number, including area code)

N/A

(Former name or former address, if changed since last report)

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Item 5. Other Events and Regulation FD Disclosure.

On June 21, 2004, MTI MicroFuel Cells Inc., the leading developer of miniaturized fuel cells suitable for handheld electronic devices and a subsidiary of Mechanical Technology Inc. (NASDAQ: MKTY), announced the introduction of Mobion™ technology.

Below is a press release issued by MTI MicroFuel Cells Inc. on June 21, 2004, announcing this technology.

For further information: For press inquiries:

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**MTI MICRO INTRODUCES MOBION™ TECHNOLOGY**

**AND DEMONSTRATES THE WORLD'S FIRST HANDHELD ENTERTAINMENT SYSTEM AND  
PDA/SMARTPHONE POWERED BY AN INTEGRATED FUEL CELL**

Breakthrough MOBION™ cord-free rechargeable power pack to provide

continuous access to power anytime, anywhere

Albany, N.Y., June 21, 2004

-- MTI MicroFuel Cells Inc. (MTI Micro), the leading developer of miniaturized fuel cells suitable for handheld electronic devices and a subsidiary of Mechanical Technology Inc. (NASDAQ: MKTY), announced the introduction of Mobion™ technology. MTI Micro's Mobion™ is based on patented direct methanol fuel cell (DMFC) technology, and represents a number of scientific breakthroughs that the Company believes will ultimately enable it to power portable devices 2 to 10 times longer than an equivalent size battery pack, while allowing for instant, cord-free re-charging.

"Mobion™ is a true breakthrough in advanced micro fuel cell technology, and is the enabling technology powering our first product shipment planned for the industrial market later this year," said Dr. William Acker, CEO and President of MTI Micro. "Our vision extends beyond the industrial market, and today's concept model demonstration of Mobion™ technology powering and integrated into handheld electronic products helps underscore our commitment to penetrating the multi-billion dollar power pack market for portable consumer electronics".

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Today MTI debuted Mobion™ technology integrated into two concept models, a handheld entertainment system and a PDA/smart phone. The integrated Mobion™ power pack is less than 40cc in size, achieving a technology milestone for the company while demonstrating miniaturization progress necessary for integration into portable electronic devices.

The announcement of Mobion™ is preceded by the establishment of an impressive list of world class supply chain partners. With Dupont, a worldwide materials and sciences leader as its membrane/electrode assembly partner, Flextronics, the world's largest electronics manufacturing services company as its manufacturing partner and Gillette/Duracell intended to provide consumer fuel refill distribution, MTI Micro is poised to translate its early technology leadership into a strong position in the power pack market for portable electronics.

"Recent advances in fuel cell materials science and technology have spurred hydrogen fuel cell development for automotive applications to address long term energy needs, whereas exciting breakthroughs have spurred portable fuel cell development using methanol fuel for much nearer term needs," said Sara Bradford, an analyst with Frost & Sullivan. "MTI Micro has combined its significant DMFC technology advances with the commercial heritage of its 42 year-old parent company MTI to launch Mobion™ -- the first micro fuel cell technology designed for the performance, manufacturability and cost profile necessary to make a significant impact on the military and commercial portable electronics markets."

Mobion™ Cord-Free Rechargeable Technology

Mobion™ is the culmination of work protected by a combination of more than 50 patents (either granted or applied for) representing a number of breakthrough discoveries. MTI Micro believes Mobion™ proprietary DMFC power pack technology has significant benefits over status quo battery packs and competing micro fuel cell designs.

At the core of Mobion™ technology is its unique approach to managing the water produced at the fuel cell cathode, and required for the chemical reaction at the fuel cell anode. Traditional DMFCs rely on complex water management "micro-plumbing" around the cell, whereby water that is produced at the cathode is collected, re-routed and mixed with incoming methanol at the anode. The Mobion™ technology architecture uses a proprietary approach which manages the water flow *internal* to the fuel cell with no pumping required.

By eliminating the need for cumbersome water management "micro-plumbing", Mobion™ technology can result in several key and distinct advantages for OEM system designers and end consumers, including:

- Powerful
  - longer run times between charges
- Manufacturable
  - less system complexity, small and light enough for handheld devices
- Affordable
  - utilizes many existing, proven and highly available materials, making Mobion™ technology cost effective for OEMs and consumers alike

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Markets Addressed

MTI Micro will ultimately address three primary markets, industrial, military and consumer electronics, through a phased entry approach. The Company plans its first shipment of Mobion™ power packs to the industrial market for use in retail, distribution and warehousing applications (such as RFID tag readers) where the shorter run-time and re-charge maintenance of traditional batteries reduce worker productivity.

MTI Micro has also begun pursuit of the military market. The Company has begun testing with government organizations and defense equipment suppliers and believes it will capitalize on those relationships by supplying rugged, high-capacity fuel cells for future military applications.

MTI Micro then plans to pursue the broader consumer market with partners such as Gillette/Duracell. Target applications will include hand-held communication devices, PDAs and other power-hungry portable electronic devices that can benefit from Mobion™ extended run-time, cord-free rechargeable power packs with continuous access to power anytime, anywhere.

About MTI MicroFuel Cells

MTI MicroFuel Cells Inc., a subsidiary of Mechanical Technology, Inc., (NASDAQ: MKTY), is the developer of Mobion™, a patented direct methanol micro fuel cell technology. The Company has a world-class team of entrepreneurial business executives, researchers and scientists; a number of system prototypes demonstrating size reductions and performance improvements; significant related intellectual property; and has received government awards and developed strategic partnerships to help accelerate commercialization. For more information: [www.mtimicrofuelcells.com](http://www.mtimicrofuelcells.com)

Statements in this press release which are not historical fact including statements regarding managements intentions, hopes, beliefs, expectations, representations, projections, plans or predictions of the future are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements include statements regarding the significance and advantages of our intellectual property and technology; the market size and penetration rate for DMFCs in general, and Mobion DMFCs in particular; Mobion product and prototype performance and potential performance; advantages of Mobion technology over batteries or other competitive technologies; the impact that any agreements or relationships may have on our success or ability to bring product to market; and our development, manufacturing or production schedules. It is important to note that the Company's actual results may differ materially from those in any such forward-looking statements. Factors that could cause actual results to differ materially include, among others, risks related to financing, uncertainties in development, manufacturing, competition and consumer demand for DMFCs, and the risk factors listed from time to time in Mechanical Technology, Inc.'s SEC reports including but not limited to, the annual report on Form 10-K for the year ended December 2003 and Quarterly Reports on form 10-Q.

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

MECHANICAL TECHNOLOGY  
INCORPORATED

(Registrant)

Date: June 21, 2004

By:

/S/ CYNTHIA A. SCHEUER

Name: Cynthia A. Scheuer

Title: Vice President and Chief

Financial Officer

