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**FOR IMMEDIATE RELEASE:**

**U.S. Patents Issued for Akonni Biosystems'  
Novel Thermal Cycling Technology**

**The First Temperature Control Device to Enable Rapid PCR  
in a Microarray Reaction Chamber**

**Frederick, MD — February 7, 2013** — Akonni Biosystems, a developer of nucleic acid extraction products that are 2-fold to 5-fold faster than industry gold standards, and low-cost mid-multiplex platforms for genetic testing, announced today that the United States Patent and Trademark Office issued two patents for its novel method for amplifying nucleic acids using polymerase chain reaction (PCR).

U.S. Patent Nos. 8,329,433 and 8,334,117 describe a rapid thermal cycling approach for PCR applications that is virtually independent of reaction chamber geometry. The approach exploits the efficient convective heat transfer mode using a recirculating liquid that expands a flexible film and can perform 45 PCR cycles in 25 minutes. These patents protect Akonni's pioneering approach to thermal cycling and give companies an alternative to the conductive heating of Peltier devices commonly used by leading manufacturers such as Life Technologies (LIFE), Bio-Rad (BIO), Roche (RO) and Cepheid (CPHD).

“These new flexible film controlled heating elements give Akonni the unique ability to rapidly amplify nucleic acids and detect disease biomarkers within a single enclosed reaction chamber on its proprietary plastic-based microarray consumable,” said Kevin Banks, Ph.D., Vice President of Strategic Development for Akonni. “The components resulting from these patents are integral to the development of our next generation of systems for low-cost mid-multiplex genetic testing in point-of-care settings.”

“These patents expand Akonni's intellectual property position in the field of mid-multiplex microarray-based technologies for rapidly identifying infectious pathogens and genetic disease,” said Banks.

### **About Akonni Biosystems**

Akonni develops highly innovative products and technologies designed to significantly increase productivity in the life science tools/sample preparation market and to dramatically lower the cost of testing in the molecular diagnostics (MDx) market. Akonni Biosystems was founded in 2003 and has more than 48 patents issued or pending. Supported by a series of government grants and contracts from NIH, CDC, DOE, DOD, NIJ, and NSF, the company has built on its founding technology by improving capabilities from sample preparation to final result. Akonni products and near-term pipeline projects include rapid sample preparation methodologies for nucleic acid extraction and mid-multiplex panel assays for detecting multi-drug-resistant tuberculosis (MDR-TB), upper respiratory infections, viral encephalitis, and healthcare-associated infections (MRSA).

**Akonni products are currently for research use only. Not for use in diagnostic procedures.**

For more information, please visit [www.akonni.com](http://www.akonni.com).

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