



**Media Contact:**

Kristi Kosloske  
Hot Off the Presses PR, Inc.  
ASSIA Inc.  
773-755-2012  
[peacekristi@att.net](mailto:peacekristi@att.net)

## **ASSIA Announces Availability of Licenses for Key DSL Phantom Mode Technology**

### ***Technology Can Boost DSL Speeds up to 800 Mbps***

**Redwood City, Calif. – December 1, 2010** – ASSIA Inc., the leading provider of high-performance software tools for Dynamic Spectrum Management (DSM) of Digital Subscriber Line (DSL) networks, today announced that it is making available licenses to essential patents for DSL Phantom Mode Technology. DSL Phantom Mode significantly increases the speeds of DSL services provided over multiple copper pairs.

“Recent Phantom Mode product announcements, advertising speeds of more than 800 Mbps, substantiate the importance of this technology, which ASSIA developed some years ago,” said Dr. John Cioffi, ASSIA’s Chairman and CEO. Major DSL vendors, including Alcatel-Lucent, Ericsson, Huawei, and Nokia Siemens Networks, have recently demonstrated or announced Phantom Mode products.

“Vectoring technology, which can practically increase speeds for consumer DSL beyond 100 Mbps, has recently been standardized, and today vendors are developing vectored DSL products,” Cioffi continued. “Phantom Mode technology leverages vectoring to provide business services over copper that will be competitive with the fastest optical services. The market interest in low-cost, high-performance copper broadband technologies is strong.”

DSL traditionally works by sending electrical signals over a single pair of wires to a subscriber’s premises. DSL speeds can be increased by a process known as “bonding,” where independent signals are sent over multiple pairs of wires to the subscriber’s premises. Phantom Mode goes a step further, sending independent signals not only over each pair of wires, but also between the pairs. In this way, two pairs of wires can deliver three to four times the data rate of a single pair, rather than the doubling that would occur with bonding of two pairs alone.

The key ASSIA invention that makes Phantom Mode communication practical is the DSL modems’ discrimination between the deliberate phantom communication signals and the resultant undesirable crosstalk that these phantoms create through electromagnetic (radio) coupling between the pairs of wires. ASSIA’s inventors discovered that this crosstalk could be removed by the application of vectoring, making Phantom Mode communication practical.

The basic concept of applying vectoring to Phantom Mode transmission was first reported by ASSIA employees in an award-winning technical paper in 2004, and ASSIA has received patents for this invention in the United States and other countries. ASSIA's solution is now being adopted by the industry. As the Director of Product Marketing at one major vendor explains, the "solution [for Phantom Mode] is to remove the cross talk, which is why we add DSL vectoring."

"ASSIA looks forward to working with DSL chipset and equipment vendors, both those already licensed and other future licensees, to realize the promise of Phantom Mode," said Cioffi. "ASSIA's interests are to ensure the best possible performance from the technology and the continued adoption of ASSIA inventions by the industry."

### **About ASSIA**

ASSIA Inc. is the leading provider of high-performance software tools for Dynamic Spectrum Management of DSL networks. ASSIA's products enable DSL service providers to realize dramatic speed and reach improvements, lowering operating and capital expenses, generating incremental revenue, and opening new business opportunities in the broadband-enabled home. ASSIA has more than 35 million lines under contract worldwide with top-tier service providers and is backed by strategic investors, including AT&T, Mingly China Growth Fund, SFR Development, Sandalwood Partners, Sofinnova Partners, Stanford University, Swisscom Ventures, T-Ventures, and Telefonica. For more information, visit [www.assia-inc.com](http://www.assia-inc.com).

###