



## Patent Office Approves 6th CogniPower Patent

Malvern, PA – March 22, 2012 CogniPower announced the approval of the sixth patent in its growing portfolio of tools for more agile and efficient switched mode power conversion. Patent Application #12358465, “Apparatus and Method for Recycling the Energy from Load Capacitance” will issue as Patent Number 8134347 later this week. It describes a new way to conserve electrical energy.

According to Founder, Tom Lawson, “The patent covers a basic principle of recovering electric energy when switching a device off. Power need not always flow from source to destination. When a device is shut off, the energy stored in filter and load capacitance in the device normally bleeds off unproductively and is lost. This patent shows a way to draw that energy back, so that it is available for future use.”

Often, equipment is left always ON, though it is actually used only a small percentage of the time. With this new technology, circuitry can be turned OFF when not in use, even when the OFF period is short. Prime applications include non-volatile memory and other computer I/O circuitry.

As the geometry of newer computing chips continues to shrink, the percentage of power lost to leakage increases. Energy saving strategies like slowing or stopping a computer's clock are no longer enough. It is better to reduce or remove the power supply voltage, but only if the stored energy can be recovered. The mechanisms for accomplishing energy recovery are patented here, with support from other enabling CogniPower patents.

The number of applications where these techniques make economic sense is now limited. However, the cost of power can be expected to rise over time, and the cost of electronic intelligence continues to fall. Therefore, applications where this method of energy recovery can provide economies and efficiencies will only increase.

Energy recovery is one of many techniques that become practical given the agility and flexibility of CogniPower switched mode power control technology.

**CogniPower** is committed to building better, more efficient power products by re-examining accepted wisdom regarding power converters in the light of new control technology, improved components, new semiconductor process technologies, and changing economics driven by energy cost and availability.

Our robust and growing patent portfolio will be the basis for fundamental improvements in how effectively and efficiently power is transformed and used, in other words, "**power smarter**."