

## PyroGenesis Files International Patent for its Latest Invention - the Plasma Fired Steam Generator

MONTREAL, Dec. 10, 2014 /CNW Telbec/ - **PyroGenesis Canada Inc.** (<http://pyrogenesis.com>) (TSXV: PYR), a TSX Venture 50® environmental solutions company that designs, develops and manufactures plasma waste-to-energy systems and plasma torch products, announced today that it has filed for an international patent (a "PCF") for its latest invention - the plasma fired steam generation system, which has 28 claims.

The plasma fired steam generator uses electricity and plasma arcs to boil untreated water where traditional water treatment processes are either unpractical or too costly. Plasma arcs struck between electrically conducting electrodes provide the energy needed to produce steam. A high current low voltage power source, either AC or DC, is used to generate and power these plasma arcs.

A PCT patent application, similar to that applied for by PyroGenesis, gives access to patent protection in 148 countries, including Canada, the United States, Europe, and most Asian countries. "If awarded, this new patent will provide PyroGenesis with patent protection on technology that could replace traditional oil or gas fired boilers in remote locations," said Pierre Carabin, Director of Engineering, "and the boiler itself is a zero emission technology, requiring only electricity to operate, and as such when combined with green power, the PyroGenesis Plasma Fired Steam Generator will become a complete cleantech solution."

One of the many potential applications for this technology is the production of high pressure steam directly from recycled water.

"The applications for this technology are widespread," said P. Peter Pascali, President and CEO of PyroGenesis, "and this patent will add quite nicely to our existing portfolio (issued, pending and provisional) which now exceeds 47 patents with hundreds of claims."

### About PyroGenesis Canada Inc.

PyroGenesis Canada, a TSX Venture 50® high-tech company, is the world leader in the design, development, manufacturing and commercialization of advanced plasma processes. We provide engineering and manufacturing expertise, cutting-edge contract research, as well as turnkey process equipment packages to the defense, metallurgical, mining, advanced materials (including 3D printing), oil & gas, and environmental industries. With a team of experienced PyroClass™ engineers, scientists and technicians working out of our Montreal office and our 3,800 m<sup>2</sup> production facility, PyroGenesis maintains its competitive advantage by remaining at the forefront of technology development and commercialization. Our core competencies allow PyroGenesis to lead the way in providing innovative plasma torches, plasma waste processes, high-temperature metallurgical processes, and engineering services to the global marketplace. Our operations are ISO 9001:2008 certified, and have been since 1997. PyroGenesis is a publicly-traded Canadian company on the TSX Venture Exchange (Ticker Symbol PYR.V). For more information, please visit [www.pyrogenesis.com](http://www.pyrogenesis.com)

*This press release contains certain forward-looking statements, including, without limitation, statements containing the words "may", "plan", "will", "estimate", "continue", "anticipate", "intend", "expect", "in the process" and other similar expressions which constitute "forward-looking information" within the meaning of applicable securities laws. Forward-looking statements reflect the Company's current expectation and assumptions, and are subject to a number of risks and uncertainties that could cause actual results to differ materially from those anticipated. These forward-looking statements involve risks and uncertainties including, but not limited to, our expectations regarding the acceptance of our products by the market, our strategy to develop new products and enhance the capabilities of existing products, our strategy with respect to research and development, the impact of competitive products and pricing, new product development, and uncertainties related to the regulatory approval process. Such statements reflect the current views of the Company with respect to future events and are subject to certain risks and uncertainties and other risks detailed from time-to-time in the Company's ongoing filings with the securities regulatory authorities, which filings can be found at [www.sedar.com](http://www.sedar.com). Actual results, events, and performance may differ materially. Readers are cautioned not to place undue reliance on these forward-looking statements. The Company undertakes no obligation to publicly update or revise any forward-looking statements either as a result of new information, future events or otherwise, except as required by applicable securities laws.*

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