

## **ClearSign Technologies Corporation Awarded Grant from Department of Energy to Develop a Hydrogen Fueled Ultra Low NOx Process Burner**

### **Grant Awarded to Support Scientific Innovation in Clean Energy Development and Climate Solutions**

TULSA, Okla., May 24, 2022 /PRNewswire/ -- ClearSign Technologies Corporation (Nasdaq: CLIR) ("ClearSign" or the "Company"), an emerging leader in industrial combustion and sensing technologies that improve energy, operational efficiency and safety while dramatically reducing emissions, announces that the Company was awarded a government grant through the Small Business Innovative Research (SBIR) program with the Department of Energy.

The goal of this project is to develop ultra-low NOx hydrogen burner technology which will enable the adoption of hydrogen fuel for industrial heating, leading to reductions in the industrial emissions of both carbon dioxide and nitrogen oxides. Current burners and previous efforts to decarbonize industrial combustion processes through the utilization of hydrogen fuel are inhibited by the lack of industrial hydrogen burners capable of burning pure hydrogen while preventing additional Nitrogen Oxides (NOx) emissions.

"We are grateful to the DOE for this grant and for recognizing the potential of ClearSign Core™ technology to provide burners for the developing hydrogen economy, which has potential substantial global ramifications, while at the same time reducing the pollutant emissions necessary to maintain a healthy environment today," said Jim Deller, Ph.D., Chief Executive Officer of ClearSign. "We have previously demonstrated our current ClearSign Core burner technology operating at full scale with over 80% hydrogen content in the fuel gas, and are confident in our ability to provide low emissions burner technology to meet the needs of the developing hydrogen fueled industrial burner applications," continued Dr. Deller.

The project and funding are in phases. The initial funding amount is approximately \$250,000 and the project will last six months starting at the end of June. If needed, and upon completion of the Phase 1 work, the Company will be able to submit a follow-up proposal to continue the development work with a Phase 2 grant. Phase 2 grant funding can be up to \$1.6 million for a two-year duration.

Through the SBIR/STTR program across the federal government, small business powers the U.S. economy and generates thousands of jobs, both directly and indirectly, the DOE notes. DOE Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) awards aim at transforming DOE-supported science and technology breakthroughs into viable products and services. The awards also support the development of specialized technologies and instruments that aid in scientific discovery.

More information about all the projects announced by DOE today is available at the following link:

<https://science.osti.gov/sbir>

### **About ClearSign Technologies Corporation**

ClearSign Technologies Corporation designs and develops products and technologies for the purpose of improving key performance characteristics of industrial and commercial systems, including operational performance, energy efficiency, emission reduction, safety and overall cost-effectiveness. Our patented technologies, embedded in established OEM products as ClearSign Core™, and ClearSign Eye™ and other sensing configurations, enhance the performance of combustion systems and fuel safety systems in a broad range of markets, including the energy (upstream oil production and down-stream refining), commercial/industrial boiler, chemical, petrochemical, transport and power industries. For more information, please visit [www.clearsign.com](http://www.clearsign.com).

### **Cautionary note on forward-looking statements**

All statements in this press release that are not based on historical fact are "forward-looking statements." You can find many (but not all) of these statements by looking for words such as "approximates," "believes," "hopes," "expects," "anticipates," "estimates," "projects," "intends," "plans," "would," "should," "could," "may," "will" or other similar expressions. While management has based any forward-looking statements included in this press release on its current expectations, the information on which such expectations were based may change. These forward-looking statements rely on a number of assumptions concerning future events and are subject to a number of risks, uncertainties and other factors, many of which are outside of our control, that could cause actual results to materially differ from such statements. Such risks, uncertainties and other factors include, but are not limited to, our performance of the Phase I work and likelihood that we submit, and are approved, for Phase II grant funding, general business and economic conditions, the performance of management and our employees, the performance of our products, our ability to obtain financing, competition,

whether our technology will be accepted and adopted and other factors identified in our Annual Report on Form 10-K filed with the Securities and Exchange Commission and available at [www.sec.gov](http://www.sec.gov) and other factors that are detailed in our periodic and current reports available for review at [www.sec.gov](http://www.sec.gov). Furthermore, we operate in a competitive environment where new and unanticipated risks may arise. Accordingly, investors should not place any reliance on forward-looking statements as a prediction of actual results. We disclaim any intention to, and undertake no obligation to, update or revise forward-looking statements to reflect events or circumstances that subsequently occur or of which we hereafter become aware.

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