

PATENTS - SUMMARY

Reference the following Patents and Trademarks owned by Marine Turbine Technologies, LLC (MTT) and Turbine Powered Technology, LLC (TPT). TPT is a technology entity wholly owned by Ted McIntyre:

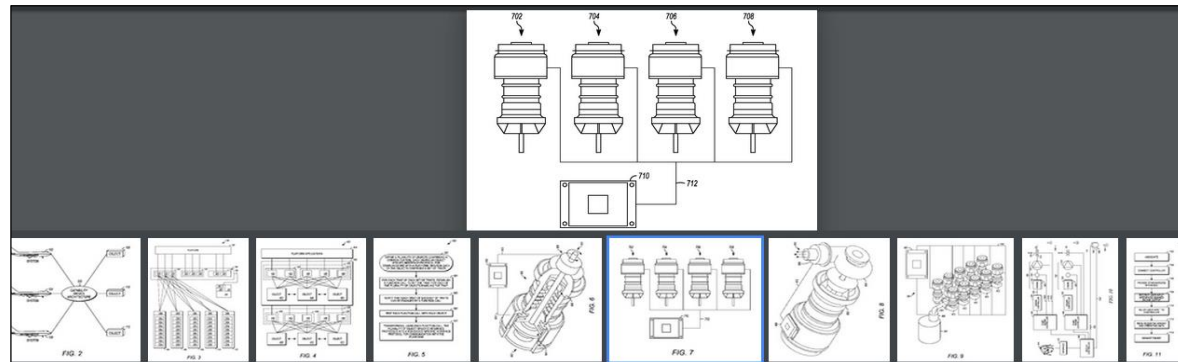
1	PATENT	US9429078B1	Multi-Compatible Digital Engine Controller	A digital engine controller compatible with multiple variants of gas turbine engine is programmed to receive identification of a variant of gas turbine engine coupled to the digital controller and thereafter to automatically determine and adjust inputs to the engine, according to the received identification of engine variant, to meet user-specified output.
2	PATENT	US9879609B1	Multi-Compatible Digital Engine Controller	A digital engine controller compatible with multiple variants of gas turbine engine is programmed to receive identification of a variant of gas turbine engine coupled to the digital controller and thereafter to automatically determine and adjust inputs to the engine, according to the received identification of engine variant, to meet user-specified output.
3	PATENT	US9869305B1	Pump-Engine Controller	A system controller manages a gas turbine engine driving a pump directly or indirectly coupled to the engine. The controller is programmed to automatically determine and adjust inputs to the gas turbine engine in order to cause the pump to produce a user-specified hydraulic output.
4	PATENT	US9689316B1	Gas Turbine Engine Overspeed Prevention	A controller for a gas turbine engine is configured to respond to one or more prescribed engine overspeed conditions. Rather than shutting the engine down, the controller substantially reduces N1 airflow and substantially concurrently activates one or more engine igniters.
5	PATENT	US9638101B1	System and Method for Automatically Controlling One or Multiple Turbogenerators	At least one controller manages a gas turbine engine driving a generator directly or indirectly coupled to the engine. The controller is programmed to automatically determine and adjust inputs to the gas turbine engine in order to cause the generator to produce a user-specified electrical output. Multiple sets of generator, engine, and controller may be used, in which case a master controller individually manages the other controllers to collectively provide the a user-specified electrical output.
6	PATENT	US9829002B2	Pump System for High Pressure Application	A pump system for high pressure, high volume applications is presented. The pump system includes a turbo-shaft engine having a drive shaft and a high pressure, high RPM centrifugal pump coupled to the drive shaft. In certain embodiments the pump system further includes a second low pressure, high RPM centrifugal pump coupled to the drive shaft.
7	PATENT	US10415557B1	Controller Assembly for Simultaneously Managing Multiple Engine/Pump Assemblies to Perform Shared Work	A pumping system includes a pump array of multiple pump-engine assemblies. Each pump-engine assembly comprises a pump and a gas turbine engine driving the pump. A manifold is coupled to the pumps. A master controller is coupled to each of the pump-engine assemblies either directly or via one or more intermediate controllers. The master controller and any intermediate controllers are collectively programmed to respond to user input including a desired hydraulic output at the manifold by automatically calculating and applying inputs to the individual pump-engine assemblies to provide the desired hydraulic output.
8	PATENT	US10465689B2	Pump System for High Pressure Application	A pump system for high pressure, high volume applications is presented. The pump system includes a turbo-shaft engine having a drive shaft and a high pressure, high RPM centrifugal pump coupled to the drive shaft. In certain embodiments the pump system further includes a second low pressure, high RPM centrifugal pump coupled to the drive shaft.
9	PATENT	US10760556B1	Pump-Engine Controller	A system controller manages a gas turbine engine driving a pump directly or indirectly coupled to the engine. The controller is programmed to automatically determine and adjust inputs to the gas turbine engine in order to cause the pump to produce a user-specified hydraulic output.
10	TRADEMARK	Registration No 4724316	CRUZFRAC	Software to control high horsepower turbine driven pumps for use in hydraulic fracturing operations; electric components to control high horsepower turbine driven pumps for use in hydraulic fracturing operations, namely, integrated circuits, processors, controllers, digital data computers, relays and sensors. Diagnostic services in the field of high horsepower turbine driven pumps.
11	TRADEMARK	Registration No. 3999924	FRAC STACK PACK	Hydraulic fracturing equipment consisting of pumps, gear boxes and turbine engines grouped together in a space-saving configuration.

1

PATENT [US9429078B1](#) Multi-Compatible Digital Engine Controller

ABSTRACT A digital engine controller compatible with multiple variants of gas turbine engine is programmed to receive identification of a variant of gas turbine engine coupled to the digital controller and thereafter to automatically determine and adjust inputs to the engine, according to the received identification of engine variant, to meet user-specified output.

ASSIGNEE Turbine Powered Technology, LLC and Tucson Embedded Systems, INC.

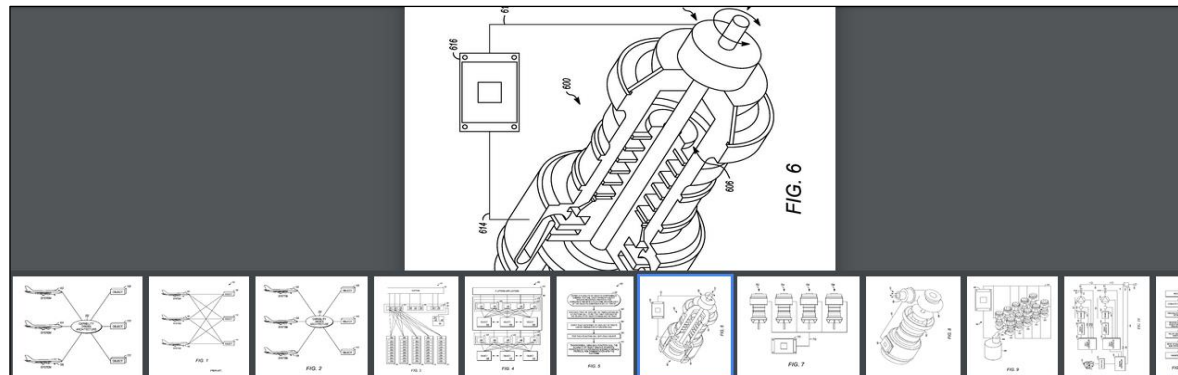


2

PATENT [US9879609B1](#) Multi-Compatible Digital Engine Controller

ABSTRACT A digital engine controller compatible with multiple variants of gas turbine engine is programmed to receive identification of a variant of gas turbine engine coupled to the digital controller and thereafter to automatically determine and adjust inputs to the engine, according to the received identification of engine variant, to meet user-specified output.

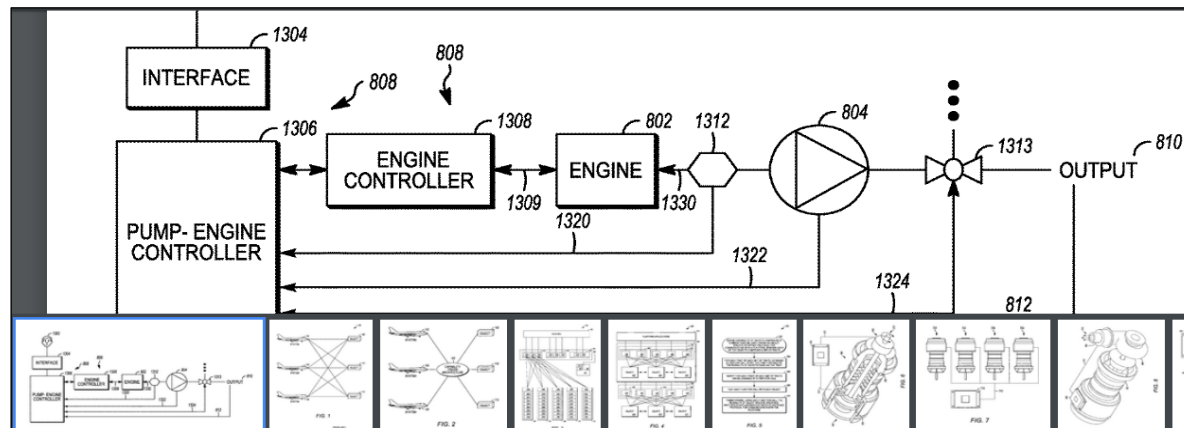
ASSIGNEE Turbine Powered Technology, LLC and Tucson Embedded Systems, INC.



PATENT [US9869305B1](#) Pump-Engine Controller

ABSTRACT A system controller manages a gas turbine engine driving a pump directly or indirectly coupled to the engine. The controller is programmed to automatically determine and adjust inputs to the gas turbine engine in order to cause the pump to produce a user-specified hydraulic output.

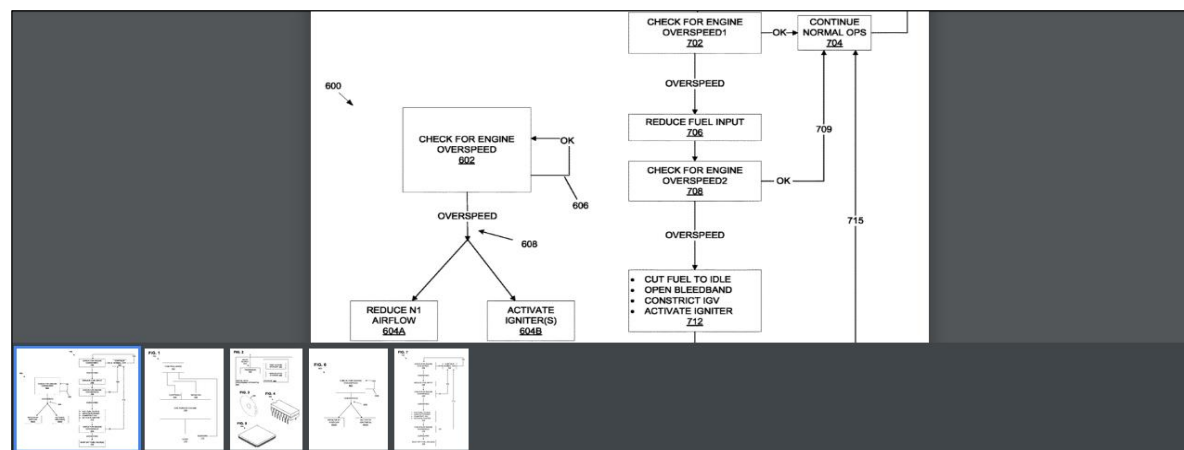
ASSIGNEE Turbine Powered Technology, LLC and Tucson Embedded Systems, INC.



PATENT [US9689316B1](#) Gas Turbine Engine Overspeed Prevention

ABSTRACT A controller for a gas turbine engine is configured to respond to one or more prescribed engine overspeed conditions. Rather than shutting the engine down, the controller substantially reduces N1 airflow and substantially concurrently activates one or more engine igniters.

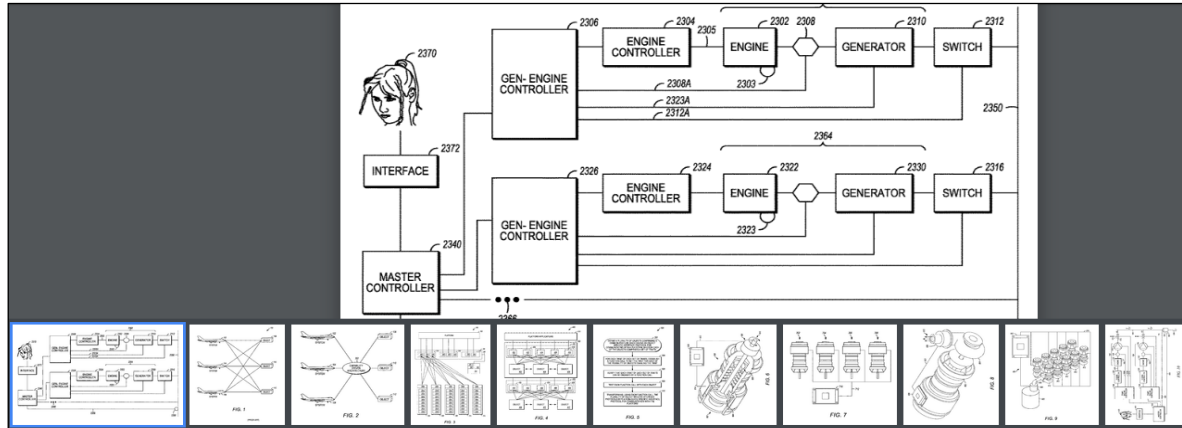
ASSIGNEE Turbine Powered Technology, LLC and Tucson Embedded Systems, INC.



PATENT [US9638101B1](#) **System and Method for Automatically Controlling One or Multiple Turbogenerators**

ABSTRACT At least one controller manages a gas turbine engine driving a generator directly or indirectly coupled to the engine. The controller is programmed to automatically determine and adjust inputs to the gas turbine engine in order to cause the generator to produce a user-specified electrical output. Multiple sets of generator, engine, and controller may be used, in which case a master controller individually manages the other controllers to collectively provide the a user-specified electrical output.

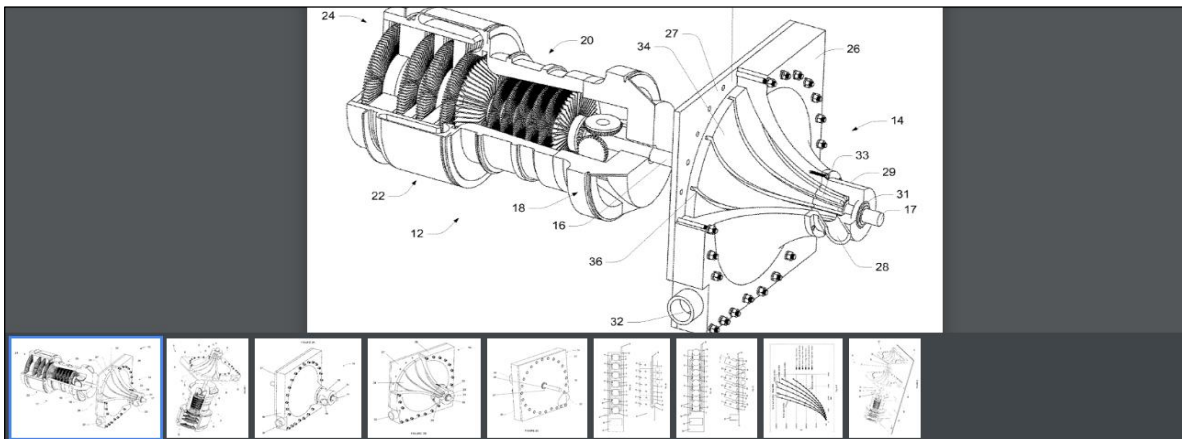
ASSIGNEE Turbine Powered Technology, LLC and Tucson Embedded Systems, INC.



PATENT [US9829002B2](#) **Pump System for High Pressure Application**

ABSTRACT A pump system for high pressure, high volume applications is presented. The pump system includes a turbo-shaft engine having a drive shaft and a high pressure, high RPM centrifugal pump coupled to the drive shaft. In certain embodiments the pump system further includes a second low pressure, high RPM centrifugal pump coupled to the drive shaft.

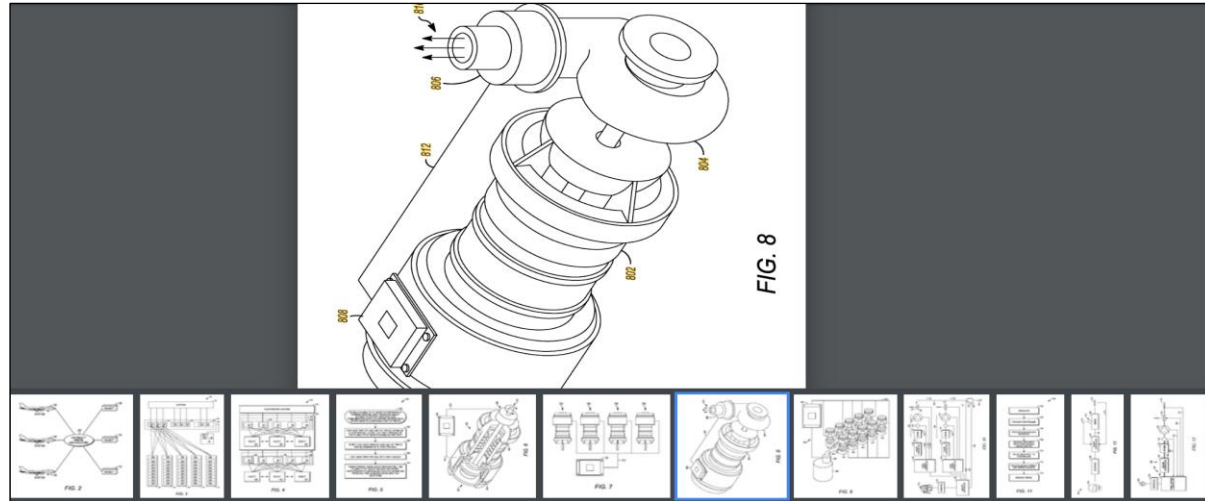
ASSIGNEE Turbine Powered Technology, LLC and Tucson Embedded Systems, INC.



PATENT [US10415557B1](#) **Controller Assembly for Simultaneously Managing Multiple Engine/Pump Assemblies to Perform Shared Work**

ABSTRACT A pumping system includes a pump array of multiple pump-engine assemblies. Each pump-engine assembly comprises a pump and a gas turbine engine driving the pump. A manifold is coupled to the pumps. A master controller is coupled to each of the pump-engine assemblies either directly or via one or more intermediate controllers. The master controller and any intermediate controllers are collectively programmed to respond to user input including a desired hydraulic output at the manifold by automatically calculating and applying inputs to the individual pump-engine assemblies to provide the desired hydraulic output.

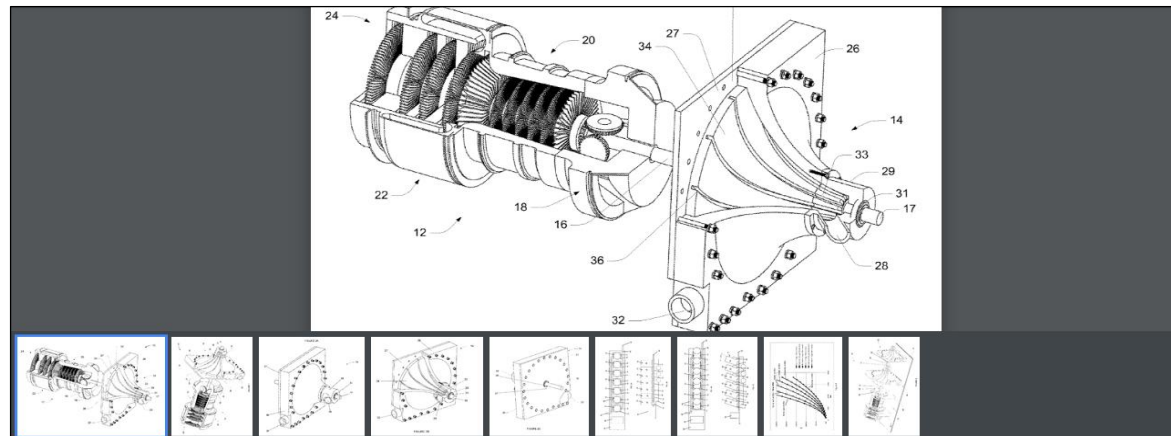
ASSIGNEE Turbine Powered Technology, LLC and Tucson Embedded Systems, INC.



PATENT [US10465689B2](#) **Pump System for High Pressure Application**

ABSTRACT A pump system for high pressure, high volume applications is presented. The pump system includes a turbo-shaft engine having a drive shaft and a high pressure, high RPM centrifugal pump coupled to the drive shaft. In certain embodiments the pump system further includes a second low pressure, high RPM centrifugal pump coupled to the drive shaft.

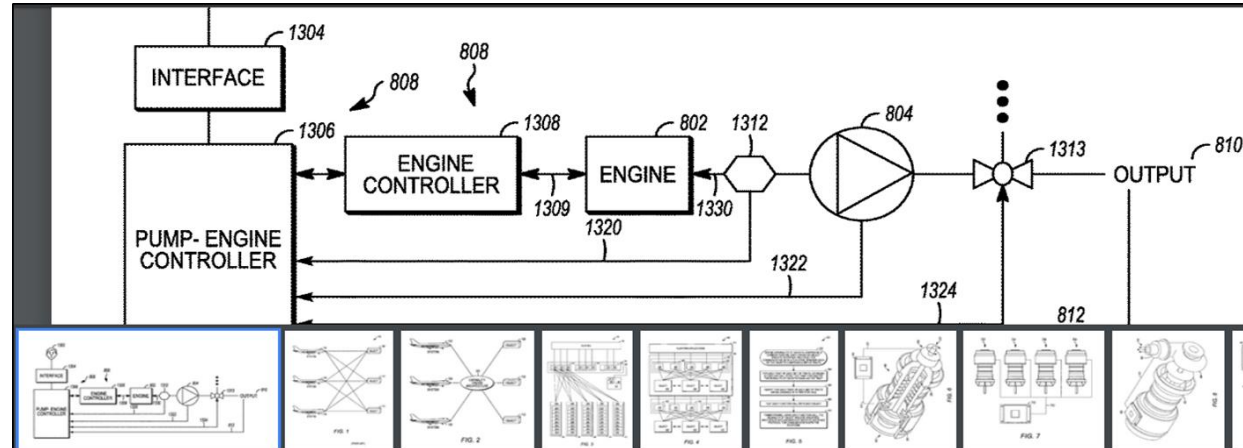
ASSIGNEE Turbine Powered Technology, LLC and Tucson Embedded Systems, INC.



PATENT [US10760556B1](#) Pump-Engine Controller

ABSTRACT A system controller manages a gas turbine engine driving a pump directly or indirectly coupled to the engine. The controller is programmed to automatically determine and adjust inputs to the gas turbine engine in order to cause the pump to produce a user-specified hydraulic output.

ASSIGNEE Turbine Powered Technology, LLC and Tucson Embedded Systems, INC.



TRADEMARK Registration No. 4724316

CRUZFRAC

GOODS AND SERVICES

Software to control high horsepower turbine driven pumps for use in hydraulic fracturing operations; electric components to control high horsepower turbine driven pumps for use in hydraulic fracturing operations, namely, integrated circuits, processors, controllers, digital data computers, relays and sensors. Diagnostic services in the field of high horsepower turbine driven pumps.

ASSIGNEE Turbine Powered Technology, LLC and Tucson Embedded Systems, INC.

United States Patent and Trademark Office
[Home](#) [Site Index](#) [Search](#) [FAQ](#) [Glossary](#) [Guides](#) [Contacts](#) [eBusiness](#) [eBiz Alerts](#) [News](#) [Help](#)

[Trademarks](#) > [Trademark Electronic Search System \(TESS\)](#)

TESS was last updated on Mon Dec 16 04:38:44 EST 2019

[TESS Home](#) [New User](#) [Structure](#) [Help](#) [About](#) [Feedback](#) [SEARCH LOG](#) [Top](#) [HELP](#)

[Logout](#): Please logout when you are done to release system resources allocated for you.

Record 1 out of 1

[TESS Home](#) [New User](#) [Structure](#) [Help](#) [About](#) [Feedback](#) [SEARCH LOG](#) [Top](#) [HELP](#) (Use the "Back" button of the Internet Browser to return to TESS)

CRUZFRAC

Word Mark CRUZFRAC
Goods and Services IC 009, US 021 023 026 036 038, G & S: Software to control high horsepower turbine driven pumps for use in hydraulic fracturing operations, electric components to control high horsepower turbine driven pumps for use in hydraulic fracturing operations, namely, integrated circuits, processors, controllers, digital data computers, relays and sensors. FIRST USE: 20140823. FIRST USE IN COMMERCE: 20141213
 IC 042, US 100 101, G & S: Diagnostic services in the field of high horsepower turbine driven pumps. FIRST USE: 20150202. FIRST USE IN COMMERCE: 20150202

Standard Characters Claimed (4) STANDARD CHARACTER MARK
Mark Drawing Code 85907104
Serial Number 85907104
Filing Date April 17, 2013
Current Basis 1A
Original Filing Basis 1B
Published for Opposition December 17, 2013
Registration Number 4724316
Registration Date April 23, 2015
Owner (REGISTRANT) Tucson Embedded Systems, Inc. CORPORATION ARIZONA Suite 160 5620 North Kolb Road Tucson ARIZONA 85750
Assignment Recorded ASSIGNMENT RECORDED
Attorney of Record Dan Hubert
Type of Mark TRADEMARK, SERVICE MARK
Register PRINCIPAL
Live/Dead Indicator LIVE

[TESS Home](#) [New User](#) [Structure](#) [Help](#) [About](#) [Feedback](#) [SEARCH LOG](#) [Top](#) [HELP](#)

TRADEMARK Registration No. 3999924

FRAC STACK PACK

GOODS AND SERVICES

Hydraulic fracturing equipment consisting of pumps, gear boxes and turbine engines grouped together in a space-saving configuration.

ASSIGNEE

Marine Turbine Technologies, LLC



United States Patent and Trademark Office

[Home](#) | [Site Index](#) | [Search](#) | [FAQ](#) | [Glossary](#) | [Guides](#) | [Contacts](#) | [eBusiness](#) | [eBiz alerts](#) | [News](#) | [Help](#)[Trademarks](#) > [Trademark Electronic Search System \(TESS\)](#)

TESS was last updated on Mon Dec 16 04:38:44 EST 2019

[TESS Home](#) | [NEW USER](#) | [STRUCTURED](#) | [FEED FORM](#) | [REVIEWS ONLY](#) | [SEARCH OIG](#) | [Bottom](#) | [HELP](#)[Logout](#) | Please logout when you are done to release system resources allocated for you.

Record 1 out of 1

[TSDR](#) | [ASSIGN Status](#) | [TTAB Status](#) (Use the "Back" button of the Internet Browser to return to TESS)

Frac Stack Pack

Word Mark	FRAC STACK PACK
Goods and Services	IC 017, US 001 005 012 013 035 050. G & S: Hydraulic fracturing equipment consisting of pumps, gear boxes, and turbine engines grouped together in a space-saving configuration. FIRST USE: 20100531. FIRST USE IN COMMERCE: 20100531
Standard Characters Claimed	
Mark Drawing Code	(4) STANDARD CHARACTER MARK
Serial Number	85004570
Filing Date	April 1, 2010
Current Basis	1A
Original Filing Basis	1B
Date Amended to Current Register	January 6, 2011
Registration Number	3999924
Registration Date	July 19, 2011
Owner	(REGISTRANT) Marine Turbine Technologies, L.L.C. LIMITED LIABILITY COMPANY LOUISIANA 298 Louisiana Road Franklin LOUISIANA 70538
Attorney of Record	Kathleen G. Mellon
Disclaimer	NO CLAIM IS MADE TO THE EXCLUSIVE RIGHT TO USE "PACK" APART FROM THE MARK AS SHOWN
Type of Mark	TRADEMARK
Register	SUPPLEMENTAL
Affidavit Text	SECT 8 (6-YR).
Live/Dead Indicator	LIVE

[TESS Home](#) | [NEW USER](#) | [STRUCTURED](#) | [FEED FORM](#) | [REVIEWS ONLY](#) | [SEARCH OIG](#) | [Top](#) | [HELP](#)