

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4380042

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	CHANGE OF NAME	
<b>CONVEYING PARTY DATA</b>		
<b>Name</b>		<b>Execution Date</b>
CHROMALLOY GAS TURBINE CORPORATION		12/03/2007
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	CHROMALLOY GAS TURBINE LLC	
<b>Street Address:</b>	330 BLAISDELL ROAD	
<b>City:</b>	ORANGEBURG	
<b>State/Country:</b>	NEW YORK	
<b>Postal Code:</b>	10962	
<b>PROPERTY NUMBERS Total: 19</b>		
<b>Property Type</b>	<b>Number</b>	
Patent Number:	8186056	
Patent Number:	7536783	
Patent Number:	6376800	
Patent Number:	6332272	
Patent Number:	6037563	
Patent Number:	7146990	
Patent Number:	7041383	
Patent Number:	6803135	
Patent Number:	6537021	
Patent Number:	6420677	
Patent Number:	6380512	
Patent Number:	6333484	
Patent Number:	6194086	
Patent Number:	6173491	
Patent Number:	6165345	
Patent Number:	6054672	
Patent Number:	5935407	
Patent Number:	5928725	
Patent Number:	5837964	

**CORRESPONDENCE DATA****Fax Number:** (714)755-8290

*Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.*

**Phone:** 714-540-1235**Email:** ipdocket@lw.com**Correspondent Name:** LATHAM & WATKINS LLP**Address Line 1:** 650 TOWN CENTER DRIVE, SUITE 2000**Address Line 4:** COSTA MESA, CALIFORNIA 92626

<b>ATTORNEY DOCKET NUMBER:</b>	044844-0002
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<b>NAME OF SUBMITTER:</b>	ANNA T KWAN
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<b>SIGNATURE:</b>	/atk/
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<b>DATE SIGNED:</b>	04/21/2017
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**Total Attachments: 12**

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# Delaware

The First State

Page 1

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED ARE TRUE AND CORRECT COPIES OF ALL DOCUMENTS ON FILE OF "CHROMALLOY GAS TURBINE LLC" AS RECEIVED AND FILED IN THIS OFFICE.

THE FOLLOWING DOCUMENTS HAVE BEEN CERTIFIED:

CERTIFICATE OF INCORPORATION, FILED THE EIGHTEENTH DAY OF MARCH, A.D. 1987, AT 10 O`CLOCK A.M.

CERTIFICATE OF OWNERSHIP, FILED THE THIRTY-FIRST DAY OF AUGUST, A.D. 1994, AT 12 O`CLOCK P.M.

CERTIFICATE OF CONVERSION, FILED THE THIRD DAY OF DECEMBER, A.D. 2007, AT 10:37 O`CLOCK A.M.

CERTIFICATE OF FORMATION, FILED THE THIRD DAY OF DECEMBER, A.D. 2007, AT 10:37 O`CLOCK A.M.

CERTIFICATE OF MERGER, FILED THE TWENTY-FIRST DAY OF JANUARY, A.D. 2011, AT 3:06 O`CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CERTIFICATES ARE THE ONLY CERTIFICATES ON RECORD OF THE



2120750 8100H  
SR# 20172282065

You may verify this certificate online at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)

A handwritten signature in black ink, appearing to read "JB", is written over a horizontal line. Below the line, the text "Jeffrey W. Bullock, Secretary of State" is printed in a small font.

Authentication: 202328563  
Date: 04-05-17

**PATENT**  
**REEL: 042119 FRAME: 0282**

# Delaware

The First State

Page 2

*AFORESAID LIMITED LIABILITY COMPANY, "CHROMALLOY GAS TURBINE  
LLC".*



2120750 8100H  
SR# 20172282065

You may verify this certificate online at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)

A handwritten signature in black ink, appearing to read "JBullock", is written over a horizontal line. Below the line, the text "Jeffrey W. Bullock, Secretary of State" is printed.

Jeffrey W. Bullock, Secretary of State

Authentication: 202328563  
Date: 04-05-17

**PATENT**  
**REEL: 042119 FRAME: 0283**

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FILED

CERTIFICATE OF INCORPORATION

MAR 18 1987

OF

CHROMALLOY GAS TURBINE CORPORATION

*Handwritten signature*

10 AM

FIRST: The name of the Corporation (hereinafter called the "Corporation") is CHROMALLOY GAS TURBINE CORPORATION.

SECOND: The address, including street, number, city and county, of the registered office of the Corporation in the State of Delaware is Corporation Trust Center, 1209 Orange Street, City of Wilmington, County of New Castle; and the name of the registered agent of the Corporation in the State of Delaware at such address is The Corporation Trust Company.

THIRD: The Corporation shall have the authority to conduct any lawful business, to promote any lawful purpose, and to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

FOURTH: The total number of shares of stock which the Corporation shall have authority to issue is 1,000 shares. All such shares are to be \$1.00 par value. All such shares are of one class and are shares of Common Stock.

FIFTH: The name and the mailing address of the incorporator are as follows:

NAME

MAILING ADDRESS

John P. Denneen

120 South Central Avenue  
Suite 1700  
St. Louis, MO 63105

SIXTH: The Corporation is to have perpetual existence.

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SEVENTH: The transfer of any of the shares of stock of the Corporation issued and outstanding shall require the consent of a majority of the board of directors.

EIGHTH: The number of stockholders of the Corporation, exclusive of persons who are employed by the Corporation and exclusive of persons who were, while employed by the Corporation, and have continued after termination of that employment to be, stockholders of the Corporation, is limited to not more than fifty, two or more persons who jointly own one or more shares being counted as one stockholder.

NINTH: Any invitation to the public to subscribe for shares of stock of the Corporation is prohibited.

TENTH: Whenever a compromise or arrangement is proposed between this Corporation and its creditors or any class of them and/or between this Corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware may, on the application in a summary way of this Corporation or of any creditor or stockholder thereof or on the application of any receiver or receivers appointed for this Corporation under the provisions of Section 291 of Title 8 of the Delaware Code or on the application of trustees in dissolution or of any receiver or receivers appointed for this Corporation under the provisions of Section 279 of Title 8 of the Delaware Code order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Corporation, as the case may be, to be summoned in such manner as the said court directs. If a majority in number representing three-fourths in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Corporation, as the case may be, agree to any

compromise or arrangement and to any reorganization of this Corporation as a consequence of such compromise or arrangement, the said compromise or arrangement and the said reorganization shall, if sanctioned by the court to which the said application has been made, be binding on all the stockholders or class of stockholders, of this Corporation, as the case may be, and also on this Corporation.

ELEVENTH: For the management of the business and for the conduct of the affairs of the Corporation, and in further definition, limitation and regulation of the powers of the Corporation and of its directors and of its stockholders or any class thereof, as the case may be, it is further provided:

1. The management of the business and the conduct of the affairs of the Corporation shall be vested in its Board of Directors. The number of directors which shall constitute the whole Board of Directors shall be fixed by, or in the manner provided in, the By-Laws. The phrase "whole Board" and the phrase "total number of directors" shall be deemed to have the same meaning, to wit, the total number of directors which the Corporation would have if there were no vacancies. No election of directors need be by written ballot.
2. After the original or other By-Laws of the Corporation have been adopted, amended, or repealed, as the case may be, in accordance with the provisions of Section 109 of the General Corporation Law of the State of Delaware, and, after the Corporation has received any payment for any of its stock, the power to adopt, amend or repeal the By-Laws of the Corporation may be exercised by the Board of Directors of the Corporation.

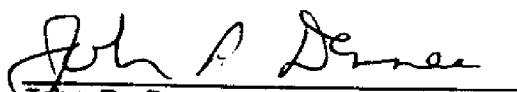
TWELFTH: No director of the Corporation shall be liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the Corporation or the stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of

Title 8 of the Delaware Code, or (iv) for any transaction from which the director derived an improper personal benefit.

THIRTEENTH: Every person who is or has been a director, officer, employee or agent of this corporation shall be indemnified by the corporation to the full extent permitted by applicable law against expenses reasonably incurred by him in connection with any action, suit or proceeding to which he may be a party defendant, or with which he shall be threatened by reason of his being or having been a director, officer, employee or agent of the corporation. The term "expenses" includes attorney's fees, judgments, fines and amounts paid in settlement. The foregoing right of indemnification shall be in addition to any other rights to which any such director, officer, employee or agent may be entitled as a matter of law.

FOURTEENTH: From time to time any of the provisions of this Certificate of Incorporation may be amended, altered or repealed, and other provisions authorized by the laws of the State of Delaware at the time in force may be added or inserted in the manner and at the time prescribed by said laws and all rights at any time conferred upon the stockholders of the Corporation by this Certificate of Incorporation are granted subject to the provisions of this Article FOURTEENTH.

I, THE UNDERSIGNED, being the incorporator hereinbefore named, for the purpose of forming a Corporation pursuant to the General Corporation Law of the State of Delaware, do make this certificate, hereby declaring and certifying that this is my act and deed and the facts herein stated are true, and accordingly have hereunto set my hand this 17th day of March, 1987.

  
John P. Denneen  
Incorporator

**CERTIFICATE OF OWNERSHIP AND MERGER**  
**MERGING**  
**ELECTRON BEAM VACUUM COATINGS, INC.**  
**INTO**  
**CHROMALLOY GAS TURBINE CORPORATION**  
\*\*\*\*\*

**CHROMALLOY GAS TURBINE CORPORATION, a corporation organized and existing under the laws of Delaware DOES HEREBY CERTIFY:**

**FIRST:** That this corporation was incorporated on March 18, 1987, pursuant to the General Corporation Law of the State of Delaware.

**SECOND:** That this corporation owns all of the outstanding shares of the stock of **Electron Beam Vacuum Coatings, Inc.**, a corporation incorporated on the 6th day of October, 1988, pursuant to the General Corporation Law of the State of California.

**THIRD:** That this corporation, by the following resolutions of the Board of Directors of this corporation, duly adopted on the 22nd day of August, 1994, determined to and pursuant to Section 253 of the Delaware General Corporation Law, does hereby merge into itself said Electron Beam Vacuum Coatings, Inc.:

**RESOLVED**, that the merger into this Corporation of Electron Beam Vacuum Coatings, Inc. is hereby authorized and approved, and upon the effective date of said merger, this Corporation assumes said subsidiary's obligations; and further

**RESOLVED**, that the merger of the foregoing subsidiary shall be effective upon the date of filing with the Secretary of State of Delaware of the Certificate of Ownership and Merger hereinafter referred to; and be it further

**RESOLVED**, that the proper officers of this Corporation be, and they hereby are, directed to make and execute under the corporate seal of this Corporation, a Certificate of Ownership and Merger setting forth a copy of


Page 1 of 2

the resolutions to merge said subsidiary into this Corporation, and for this Corporation to assume its liabilities and obligations on the date of adoption hereof, and to cause the same to be filed with the Secretary of State and a certified copy in the Office of the Recorder of Deeds of New Castle County, and to do all acts and things whatsoever required, whether within or without the State of Delaware, which may in any way be necessary or proper to effect said merger.

**FOURTH:** Anything herein or elsewhere to the contrary notwithstanding, this merger may be terminated and abandoned by the Board of Directors of Chromalloy Gas Turbine Corporation at any time prior to the date of filing the merger with the Secretary of State.

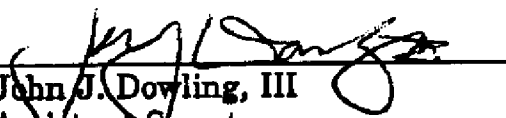
**IN WITNESS WHEREOF,** said Chromalloy Gas Turbine Corporation has caused its corporate seal to be hereunto affixed and this certificate to be signed by Stuart Z. Krinsly, its Vice President and attested by John J. Dowling, III, its Secretary, this 24th day of August, 1994.

**CHROMALLOY GAS TURBINE  
CORPORATION**

By:   
Stuart Z. Krinsly  
Vice President

(Corporate Seal)

**ATTEST:**

By:   
John J. Dowling, III  
Assistant Secretary

**CERTIFICATE OF FORMATION**  
**OF**  
**CHROMALLOY GAS TURBINE LLC**

The undersigned, an authorized natural person, for the purpose of forming a limited liability company, under the provisions and subject to the requirements of the State of Delaware (particularly Chapter 18, Title 6 of the Delaware Code and the acts amendatory thereof and supplemental thereto, and known, identified, and referred to as the "Delaware Limited Liability Company Act"), hereby certifies that:

**FIRST:** The name of the limited liability company (hereinafter called the "limited liability company") is:

**Chromalloy Gas Turbine LLC**

**SECOND:** The address of the registered office and the name and the address of the registered agent of the limited liability company required to be maintained by Section 18-104 of the Delaware Limited Liability Company Act are:

The Corporation Trust Company  
Corporation Trust Center  
1209 Orange Street  
Wilmington, New Castle County, Delaware 19801

**THIRD:** This Certificate of Formation shall be effective upon filing.

Executed on December 3, 2007

/s/ Eleanor Romanelli

\_\_\_\_\_  
Eleanor Romanelli  
Authorized Person

**CERTIFICATE OF CONVERSION**  
**OF**  
**CHROMALLOY GAS TURBINE CORPORATION**  
**(a Delaware corporation)**  
**INTO**  
**CHROMALLOY GAS TURBINE LLC**  
**(a Delaware limited liability company)**

(Under Section 266 of the General Corporation Law of the State of Delaware  
and Section 18-214 of the Delaware Limited Liability Company Act)

1. The name of the corporation immediately prior to filing this certificate of conversion is:

**CHROMALLOY GAS TURBINE CORPORATION**

2. The corporation hereby being converted to a limited liability company was first incorporated under the laws of the State of Delaware on March 18, 1987, and the jurisdiction of the corporation immediately prior to filing this certificate of conversion is Delaware.
3. The name of the limited liability company as set forth in the Certificate of Formation, filed contemporaneously with this Certificate of Conversion, filed in accordance with Chapter 18, Title 6 of the Delaware Code is:

**CHROMALLOY GAS TURBINE LLC**

4. The conversion has been approved in accordance with the provisions of Section 266 of the General Corporation Law of the State of Delaware and Section 18-214 of the Delaware Limited Liability Company Act.

*[Signature page follows]*

IN WITNESS WHEREOF, the undersigned being duly authorized to sign on behalf of the converting corporation has executed this Certificate of Conversion on this 3rd day of December, 2007.

By: /s/ John J. Dowling III

Name: John J. Dowling III

Title: Senior Vice President & Secretary

**STATE OF DELAWARE  
CERTIFICATE OF MERGER OF  
DOMESTIC LIMITED LIABILITY COMPANIES**

Pursuant to Title 6, Section 18-209 of the Delaware Limited Liability Act, the undersigned limited liability company executed the following Certificate of Merger:

**FIRST:** The name of the surviving limited liability company is

Chromalloy Gas Turbine LLC

and the name of the limited liability company being merged into this surviving limited liability company is Turbine Airfoil Coating and Repair LLC.

**SECOND:** The Agreement of Merger has been approved, adopted, certified, executed and acknowledged by each of the constituent limited liability companies.

**THIRD:** The name of the surviving limited liability company is

Chromalloy Gas Turbine LLC

**FOURTH:** The merger is to become effective on January 21, 2011.

**FIFTH:** The Agreement of Merger is on file at Chromalloy Gas Turbine LLC

the place of business of the surviving limited liability company.

**SIXTH:** A copy of the Agreement of Merger will be furnished by the surviving limited liability company on request, without cost, to any member of the constituent limited liability companies.

**IN WITNESS WHEREOF**, said surviving limited liability company has caused this certificate to be signed by an authorized person, the 21st day of January, A.D., 2011.

By: 

Authorized Person

Name: James P. Langelotti

Print or Type

Title: Vice President and Treasurer