505959606 03/10/2020

#### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6006313

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
ABOUBAKR SALEM	03/05/2020
MOHAMED ALI ABIDO	03/01/2020
MOHAMED MAMDOUH	03/03/2020

#### **RECEIVING PARTY DATA**

Name:	KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS
Street Address:	P.O. BOX 5071, INNOVATION AND INDUSTRIAL RELATION, INNOVATION CLUSTER BUILDING, DTV
City:	DHAHRAN
State/Country:	SAUDI ARABIA
Postal Code:	31261

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16814137

#### **CORRESPONDENCE DATA**

Fax Number: (703)413-2220

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: (703) 413-3000 Email: mkorsen@oblon.com **Correspondent Name:** OBLON, ET AL. Address Line 1: 1940 DUKE STREET

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER:	527314US
NAME OF SUBMITTER:	MATTHEW KORSEN
SIGNATURE:	/Matthew Korsen/
DATE SIGNED:	03/10/2020
	This document serves as an Oath/Declaration (37 CFR 1.63).

#### **Total Attachments: 3**

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Docket Number: 527314US

# DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of Invention	PREDICTIVE TORQUE CONTROL AND CAPACITOR BALANCING OF A SILICON-CARBIDE BASED DUAL T-TYPE DRIVE SYSTEM	
As the below named inventor, I hereby declare that:		
	The attached application, or	
	United States application or PCT international application number	
	ed application was made or authorized to be made by me.	
I believe that I am	the original inventor or an original joint inventor of a claimed invention in the application.	
WHEREAS, King Fahd University of Petroleum and Minerals  (hereinafter referred to as "ASSIGNEE") having places of business at: P.O. Box 5071, Innovation and Industrial Relation, Innovation Cluster Building, DTV, Dhahran, Saudi Arabia 31261, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;		
acknowledged, and said ASSIGNEE, 1 and in all foreign of other relevant Inte- interest in and to possessions and is substitutions and r		
any and all foreig assignee of my en	rize and request the Patent Office Officials in the United States and its territorial possessions and an countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the string right, title and interest in and to the same, for the sole use and benefit of said ASSIGNEE, its and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and ne would have been held by me had this Assignment and sale not been made.	
Further, I agree respecting said in continuation, substall of said Letters possible to aid said invention in the U	that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, stitute, renewal and reissue applications, execute all necessary assignment papers to cause any and is Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything aid ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said united States and its territorial possessions and in any and all foreign countries.	
I hereby ackno by fine or impriso	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 omment of not more than five (5) years, or both.	
LEGAL NAME C	OF INVENTOR	
Inventor: About	bakr SALEM Date: March 51, 2020	
Signature:	Absubaler Saler	

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

Docket Number: 527314US

## DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of Invention	PREDICTIVE TORQUE CONTROL AND CAPACITOR BALANCING OF A SILICON-CARBIDE BASED DUAL T-TYPE DRIVE SYSTEM
As the below name	d inventor, I hereby declare that:
This declaration 🗵	The attached application, or
is directed to:	United States application or PCT international application number
The above-identific	ed application was made or authorized to be made by me.
I believe that I am	the original inventor or an original joint inventor of a claimed invention in the application.
WHEREAS, King Fahd University of Petroleum and Minerals (hereinafter referred to as "ASSIGNEE") having places of business at: P.O. Box 5071, Innovation and Industrial Relation, Innovation Cluster Building, DTV, Dhahran, Saudi Arabia 31261, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;	
NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.	
any and all foreign assignee of my ent (his) successors an	ze and request the Patent Office Officials in the United States and its territorial possessions and a countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the ire right, title and interest in and to the same, for the sole use and benefit of said ASSIGNEE, its d assigns, to the full end of the term for which said Letters Patent may be granted, as fully and a would have been held by me had this Assignment and sale not been made.
Further, I agree that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.	
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.	
LEGAL NAME OF	INVENTOR
Inventor: Moham	ed Ali ABIDO Date: March 1,2020
Signature:	241

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

Docket Number: 527314US

### DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

	Invention	SILICON-CARBIDE BASED DUAL T-TYPE DRIVE SYSTEM
As the below named inventor, I hereby declare that:		l inventor, I hereby declare that:
	This declaration 🛭	The attached application, or
	is directed to:	United States application or PCT international application number
	The above-identifie	d application was made or authorized to be made by me.
	I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.	
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	NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereb acknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unt said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possession and in all foreign countries (including the right to claim priority under the terms of the International Convention an other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title an interest in and to any and all Letters Patent which may be granted therefor in the United States and its territoric possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuation substitutions and renewals thereof.	
	any and all foreign assignee of my ent (his) successors an	ze and request the Patent Office Officials in the United States and its territorial possessions and countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the regist, title and interest in and to the same, for the sole use and benefit of said ASSIGNEE, its d assigns, to the full end of the term for which said Letters Patent may be granted, as fully and would have been held by me had this Assignment and sale not been made.
	respecting said in continuation, subst- all of said Letters possible to aid said	that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me vention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, tute, renewal and reissue applications, execute all necessary assignment papers to cause any and Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything I ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said ited States and its territorial possessions and in any and all foreign countries.
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.( by line or imprisonment of not more than five (5) years, or both.		
LEGAL NAME OF INVENTOR		INVENTOR
	Inventor: Moham	ed MAMDOUH Dete: 3/3/2c2
	1	Mandollh

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.
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1940 DUKE STREET
ALEXANDRIA, VIRGINIA 22314

PATENT REEL: 052068 FRAME: 0648

**RECORDED: 03/10/2020**