505290069 01/22/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
VENKATA LAKSHMI CHENNAKESEVA RAO BAVANARI	01/18/2019
ISMAIL SHAIK	01/08/2019
PRAKASH CHAND JAIN	01/18/2019
SEETA RAMA ANJANEYULU PAMARTHI	01/18/2019
NAVEED ALI	01/18/2019
RANAJIT DAS	01/18/2019
KAIKOBAD ERACHSHAW KAPADIA	01/18/2019

RECEIVING PARTY DATA

Name:	CHAIRMAN, DEFENCE RESEARCH&DEVELOPMENT ORGANISATION (DRDO)
Street Address:	MINSTRY OF DEFENCE, GOVT OF INDIA, ROOM NO.348, B-WING, DRDO BHAWAN, RAJAJI MARG
City:	NEW DELHI
State/Country:	INDIA
Postal Code:	110011

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16319176

CORRESPONDENCE DATA

Fax Number: (703)683-8396

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.

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Email: DDEAN@NATHLAW.COM
Correspondent Name: NATH, GOLDBERG & MEYER

Address Line 1: 112 S. WEST STREET

Address Line 2: 36191-DD

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER:	36191U-DD
NAME OF SUBMITTER:	JERALD L. MEYER

PATENT 505290069 REEL: 048094 FRAME: 0064

SIGNATURE:	/JERALD L. MEYER/
DATE SIGNED:	01/22/2019
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 7	
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docket no. 36191U (FP08155/BS/nk)

As the undersigned inventor, I hereby declare that this Declaration under 37 CFR §1.63 is directed to the following invention:

		9	
Title:	BI-DI	RECTIONAL WING UNFOLDING MECHANISM	
U.S. a	oplicati	on serial number or PCT international application number	PCT/IB2017/054165
Filed o	n 11	July 2017	
The ab	ove-id	entified application was made or authorized to be made by r	ne.
I belie	ve tha	I am the original inventor or an original joint inventor of	a claimed invention in the
applica		CHAIRMAN, DEFENCE RESEARCH&DEVELOP	
WHER		ORGANISATION (DRDO)	
whose	busine	ess address is Ministry of Defence, Govt of India, Room No.348, B-Wing, DRDO E 110011, India	Bhawan, Rajaji Marg, New Delhi
herein: United	after re States	ferred to as the ASSIGNEE, desires to acquire the entire risand elsewhere throughout the world in and to said invention	ght, title and interest for the on and application, including

hereinafter referred to as the ASSIGNEE, desires to acquire the entire right, title and interest for the United States and elsewhere throughout the world in and to said invention and application, including any and all divisions and continuations thereof, all rights of priority under the terms of the International Convention for the Protection of Industrial Property, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereof.

NOW, THEREFORE, in consideration of the sum of one dollar (\$1.00) and other good and valuable consideration, the receipt, adequacy and sufficiency of which are hereby acknowledged, the undersigned hereby assigns, sells and transfers to said ASSIGNEE, its assigns and legal representatives, the entire right, title and interest for the United States and elsewhere throughout the world, in and to said invention and application, including any and all divisions and continuations thereof, all rights of priority under the terms of the International Convention for the Protection of Industrial Property, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges, and advantages in any way arising from or pertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said ASSIGNEE and its assigns and legal representatives, in as ample and as beneficial a manner for all intents and purposes as the undersigned might or could have held and enjoyed the same had this assignment not been made.

The undersigned hereby agrees to execute all papers necessary to file said applications in the United States and elsewhere throughout the world, and to assign the same to said ASSIGNEE, or any assignee acquiring title to said invention, and to execute any other papers that may be needed in connection with filing said application and securing any and all Letters Patent thereon. The undersigned authorizes and requests the Commissioner of Patents to issue a Letters Patent on said application, and on any and all divisions and continuations thereof, to said ASSIGNEE, its assigns and legal representatives, in accordance herewith.

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:	Venkata Lakshmi Chennakeseva Rao BAVANARI
INVENTOR SIGNATURE:	V.L. Chenrakezina Ravj.
DATE:	

docket no. 36191U (FP08155/BS/nk)

As the undersigned inventor, I hereby declare that this Declaration under 37 CFR §1.63 is directed to the following invention: **BI-DIRECTIONAL WING UNFOLDING MECHANISM** Title: U.S. application serial number or PCT international application number PCT/IB2017/054165 Filed on 11 July 2017 The above-identified 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. CHAIRMAN, DEFENCE RESEARCH&DEVELOPMENT **ORGANISATION (DRDO)** WHEREAS. whose business address is Ministry of Defence, Govt of India, Room No.348, B-Wing, DRDO Bhawan, Rajaji Marg, New Delhi 110011, India hereinafter referred to as the ASSIGNEE, desires to acquire the entire right, title and interest for the United States and elsewhere throughout the world in and to said invention and application, including any and all divisions and continuations thereof, all rights of priority under the terms of the International Convention for the Protection of Industrial Property, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereof. NOW, THEREFORE, in consideration of the sum of one dollar (\$1.00) and other good and valuable consideration, the receipt, adequacy and sufficiency of which are hereby acknowledged, the undersigned hereby assigns, sells and transfers to said ASSIGNEE, its assigns and legal representatives, the entire right, title and interest for the United States and elsewhere throughout the world, in and to said invention and application, including any and all divisions and continuations thereof, all rights of priority under the terms of the International Convention for the Protection of Industrial Property, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges, and advantages in any way arising from or pertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said ASSIGNEE and its assigns and legal representatives, in as ample and as beneficial a manner for all intents and purposes as the undersigned might or could have held and enjoyed the same had this assignment not been made. The undersigned hereby agrees to execute all papers necessary to file said applications in the United States and elsewhere throughout the world, and to assign the same to said ASSIGNEE, or any assignee acquiring title to said invention, and to execute any other papers that may be needed in connection with filing said application and securing any and all Letters Patent thereon. The undersigned authorizes and requests the Commissioner of Patents to issue a Letters Patent on said application, and on any and all divisions and continuations thereof, to said ASSIGNEE, its assigns and legal representatives, in accordance herewith. 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: | Ismail SHAIK INVENTOR SIGNATURE: _____ DATE:

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As the undersigned inventor, I hereby declare that this Declaration under 37 CFR §1.63 is directed to the following invention:

Tino; B	I-DIRECTIONAL WING UNFOLDING MECHANISM	
U.S. appli	cation serial number or PCT international application number	PCT/IB2017/054165
Filed on	11 July 2017	
The abov	e-identified application was made or authorized to be made by	me.
	that I am the original inventor or an original joint inventor of	d a claimed invention in the
applicatio	Attenditional page granters the agreement particular page at	MENT
WHEREA		
	Bandes Acklines is. Ministry of Delence, Gove of India, Room No.348, 8-Wing, DRDO 110011, India	
hereinalte	er referred to as the ASSIGNEE, desires to acquire the entire	right, title and interest for the

hereinafter referred to as the ASSIGNEE, desires to acquire the entire right, title and interest for the United States and elsewhere throughout the world in and to said invention and application, including any and all divisions and continuations thereof, all rights of priority under the terms of the international Convention for the Protection of Industrial Property, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and protongations thereof.

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The undersigned hereby agrees to execute all papers necessary to tile said applications in the United States and elsewhere throughout the world, and to assign the same to said ASSIGNEE, or any assignee acquiring title to said invention, and to execute any other papers that may be needed in connection with filing said application and securing any and all Letters Patent thereon. The undersigned authorizes and requests the Commissioner of Patents to issue a Letters Patent on said application, and on any and all divisions and continuations thereof, to said ASSIGNEE, its assigns and legal representatives, in accordance herewith.

I hereby acknowledge that any willful false statement made in this Declaration is punishable under 18 U.S.C. §1001 by line or imprisonment of not more than five (5) years, or both.

LEGAL NAME OF INVENTOR: Prakash Chand JAIN		
INVENTOR SIGNATURE:		$e^{-c_0 c_0 c_0 c_0 c_0 c_0 c_0 c_0 c_0 c_0 $
DATE:	and the second second	

docket no. 361910 (FPG8155/BS/nk)

As the undersigned inventor, I hereby declare that this Declaration under 37 CFR §1.63 is directed to the following invention:
Title: BI-DIRECTIONAL WING UNFOLDING MECHANISM
U.S. application serial number or PCT international application number PCT/IB2017/054165
Filed on 11 July 2017
The above-identified 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
WHEREAS, ORGANISATION (DRDO)
whose business address is Ministry of Defence, Govt of India, Room No.348, B-Wing, DRDO Bhawan, Rajaji Marg, New Delhi 110011, India
hereinafter referred to as the ASSIGNEE, desires to acquire the entire right, title and interest for the United States and elsewhere throughout the world in and to said invention and application, including any and all divisions and continuations thereof, all rights of priority under the terms of the International Convention for the Protection of Industrial Property, and any and all Letters Paten which may be granted thereon, including any and all renewals, reissues and prolongations thereof.
NOW, THEREFORE, in consideration of the sum of one dollar (\$1.00) and other good and valuable consideration, the receipt, adequacy and sufficiency of which are hereby acknowledged the undersigned hereby assigns, sells and transfers to said ASSIGNEE, its assigns and legal representatives, the entire right, title and interest for the United States and elsewhere throughout the world, in and to said invention and application, including any and all divisions and continuations thereof, all rights of priority under the terms of the International Convention for the Protection of Industrial Property, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges, and advantages in any way arising from or pertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said ASSIGNEE and its assigns and legal representatives, in as ample and as beneficial a manner for all intents and purposes as the undersigned might or could have held and enjoyed the same had this assignment not been made.
The undersigned hereby agrees to execute all papers necessary to file said applications in the United States and elsewhere throughout the world, and to assign the same to said ASSIGNEE, or any assignee acquiring title to said invention, and to execute any other papers that may be needed in connection with filing said application and securing any and all Letters Patent thereon. The undersigned authorizes and requests the Commissioner of Patents to issue a Letters Patent on said application, and on any and all divisions and continuations thereof, to said ASSIGNEE, its assigns and legal representatives, in accordance herewith.
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: Seeta Rama Anjaneyulu PAMARTHI
INVENTOR SIGNATURE: P8 maiare political
DATE:

DECLARATION UNDER 37 CFR §1.63 AND ASSIGNMENT docket_no._361910 (FP08155/BS/nk)

As the undersigned inventor, I hereby declare that this Declaration under 37 CFR §1.63 is directed to the following invention:
Title: BI-DIRECTIONAL WING UNFOLDING MECHANISM
U.S. application serial number or PCT international application number PCT/IB2017/054165
Filed on 11 July 2017
The above-identified 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
WHEREAS, ORGANISATION (DRDO)
whose business address is Ministry of Defence, Govt of India, Room No.348, B-Wing, DRDO Bhawan, Rajaji Marg, New Delhi 110011, India
hereinafter referred to as the ASSIGNEE, desires to acquire the entire right, title and interest for the United States and elsewhere throughout the world in and to said invention and application, including any and all divisions and continuations thereof, all rights of priority under the terms of the International Convention for the Protection of Industrial Property, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereof. NOW, THEREFORE, in consideration of the sum of one dollar (\$1.00) and other good and valuable consideration, the receipt, adequacy and sufficiency of which are hereby acknowledged, representatives, the entire right, title and interest for the United States and elsewhere throughout the world, in and to said invention and application, including any and all divisions and continuations thereof, all rights of priority under the terms of the International Convention for the Protection of industrial Property, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges, and advantages in any way arising from or pertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said ASSIGNEE and its assigns and legal representatives, in as an and an absolute the same had this assignment not been made.
The undersigned hereby agrees to execute all papers necessary to file said applications in the United States and elsewhere throughout the world, and to assign the same to said ASSIGNEE, are acquiring title to said invention, and to execute any other papers that may be eeded in connection with filing said application and securing any and all Letters Patent thereon. The undersigned authorizes and requests the Commissioner of Patents to issue a Letters Patent on aid application, and on any and all divisions and continuations thereof, to said ASSIGNEE, its ssigns and legal representatives, in accordance herewith.
I hereby acknowledge that any willful false statement made in this Declaration is punishable nder 18 U.S.C. §1001 by fine or imprisonment of not more than five (5) years, or both.
EGAL NAME OF INVENTOR: Naveed ALI
IVENTOR SIGNATURE: Named Ah.
ATE:

docket no. 36191U (FP08155/BS/nk)

As the undersigned inventor, I hereby declare that this Declaration under 37 CFR $\S 1.63$ is directed to the following invention:

Title: BI-DIRECTIONAL WING UNFOLDING MECHANISM			
J.S. application serial number or PCT international application number PCT/IB2017/054165			
5.3. application send number of 101 international application number			
Filed on 11 July 2017			
The above-identified 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, WHEREAS,			
whose business address is Ministry of Defence, Govt of India, Room No.348, B-Wing, DRDO Bhawan, Rajaji Marg, New Delhi 110011, India			
hereinafter referred to as the ASSIGNEE, desires to acquire the entire right, title and interest for the United States and elsewhere throughout the world in and to said invention and application, including any and all divisions and continuations thereof, all rights of priority under the terms of the International Convention for the Protection of Industrial Property, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereof.			
NOW, THEREFORE, in consideration of the sum of one dollar (\$1.00) and other good and valuable consideration, the receipt, adequacy and sufficiency of which are hereby acknowledged, the undersigned hereby assigns, sells and transfers to said ASSIGNEE, its assigns and legal representatives, the entire right, title and interest for the United States and elsewhere throughout the world, in and to said invention and application, including any and all divisions and continuations thereof, all rights of priority under the terms of the International Convention for the Protection of Industrial Property, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges, and advantages in any way arising from or pertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said ASSIGNEE and its assigns and legal representatives, in as ample and as beneficial a manner for all intents and purposes as the undersigned might or could have held and enjoyed the same had this assignment not been made.			
The undersigned hereby agrees to execute all papers necessary to file said applications in the United States and elsewhere throughout the world, and to assign the same to said ASSIGNEE, or any assignee acquiring title to said invention, and to execute any other papers that may be needed in connection with filing said application and securing any and all Letters Patent thereon. The undersigned authorizes and requests the Commissioner of Patents to issue a Letters Patent on said application, and on any and all divisions and continuations thereof, to said ASSIGNEE, its assigns and legal representatives, in accordance herewith.			
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: Ranajit DAS			
INVENTOR SIGNATURE: Ranagit Das			
DATE:			

docket no. 361910 (FP08155/BS/nk)

As the undersigned inventor, I hereby declare that this Declaration under 37 CFR §1.63 is directed to the following invention:

Title: BI-D	RECTIONAL WING UNFOLDING MECHANISM	
U.S. application serial number or PCT international application number		PCT/IB2017/054165
Filed on 11	July 2017	
The above-id	lentified application was made or authorized to be made by r	ne.
application. WHEREAS,	t I am the original inventor or an original joint inventor of CHAIRMAN, DEFENCE RESEARCH&DEVELOPMORGANISATION (DRDO) ess address is Ministry of Defence, Govt of India, Room No.348, B-Wing, DRDO E	MENT
United States any and all International	eferred to as the ASSIGNEE, desires to acquire the entire rises and elsewhere throughout the world in and to said invention divisions and continuations thereof, all rights of priority Convention for the Protection of Industrial Property, and e granted thereon, including any and all renewals, reissues a	ght, title and interest for the on and application, including y under the terms of the any and all Letters Paten
valuable con the undersig representativ world, in and thereof, all r Industrial Pro all renewals advantages i all such Lett thereof, for the ample and a	T, THEREFORE, in consideration of the sum of one dollar (sideration, the receipt, adequacy and sufficiency of which med hereby assigns, sells and transfers to said ASSIGN res, the entire right, title and interest for the United States and to said invention and application, including any and all ights of priority under the terms of the International Convergency, and any and all Letters Patent which may be granted, reissues and prolongations thereof, with all the rights of any way arising from or pertaining thereto, for and during the use and benefit of said ASSIGNEE and its assigns and as beneficial a manner for all intents and purposes as the land enjoyed the same had this assignment not been made.	are hereby acknowledged NEE, its assigns and legalled elsewhere throughout the divisions and continuations ention for the Protection of thereon, including any and some powers, privileges, and he term or terms of any and reissues and prolongations legal representatives, in as
the United S or any assig needed in co The undersig said applicat	undersigned hereby agrees to execute all papers necessar tates and elsewhere throughout the world, and to assign the gree acquiring title to said invention, and to execute any connection with filing said application and securing any and gred authorizes and requests the Commissioner of Patents tion, and on any and all divisions and continuations there legal representatives, in accordance herewith.	e same to said ASSIGNEE other papers that may be all Letters Patent thereon to issue a Letters Patent or
I hero under 18 U.S	eby acknowledge that any willful false statement made in th S.C. §1001 by fine or imprisonment of not more than five (5)	is Declaration is punishable years, or both.
LEGAL NA	ME OF INVENTOR: KaikobadErachshaw KAPADIA	
INVENTOF	R SIGNATURE:	
DATE:	, VV	

PATENT REEL: 048094 FRAME: 0072

RECORDED: 01/22/2019