

<i>Search Notes</i> 	Application/Control No. 16/813,862	Applicant(s)/Patent Under Reexamination Barbero Calzado et al.
	Examiner Barry Chestnut	Art Unit 1648

CPC - Searched*		
Symbol	Date	Examiner
A61K39/12,C12N2770/24134,Y02A50/30,C12N7/00,A61K2039/53	04/21/2021	BC / AU 1648

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
Inventor search- Barbero, C., Nebenfuhr, M., Schlegl, R., Weber, M., Heindl-Wruss, J. (PALM/EAST all inventors)	04/21/2021	BC / AU 1648
NPL search-attached- Google Scholar	04/21/2021	BC / AU 1648
Updated inventor search- Barbero, C., Nebenfuhr, M., Schlegl, R., Weber, M., Heindl-Wruss, J. (PALM/EAST all inventors)	08/03/2021	BC / AU 1648

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner
US PG PUB		04/21/2021	BC / AU 1648
UPAD		04/21/2021	BC / AU 1648
NCBI BLAST	SEQ ID NO: 72 (see attached Blast PDF)	04/21/2021	BC / AU 1648

/BARRY A CHESTNUT/ Primary Examiner, Art Unit 1648	08/03/2021
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<i>Search Notes</i> 	Application/Control No. 16/813,862	Applicant(s)/Patent Under Reexamination Barbero Calzado et al.
	Examiner Barry Chestnut	Art Unit 1648

/BARRY A CHESTNUT/ Primary Examiner, Art Unit 1648	08/03/2021
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EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1,237	((("BARBERO") near3 ("CALZADO") near3 ("Jana")) OR ((("NEBENFÄHR") near3 ("Mario")) OR ((("SCHLEGL") near3 ("Robert")) OR ((("WEBER") near3 ("Michael")) OR ((("HEINDL-WRUSS") near3 ("JÄrgen")))).INV.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2021/08/03 06:55
L2	1,237	L1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2021/08/03 06:55
L3	520	Zika and vir\$5 and RNA	USPAT	OR	OFF	2021/08/03 06:55
L4	168	L3 and genome and antibod\$7 and titer	USPAT	OR	OFF	2021/08/03 06:55
L5	24	L4 and microneutralization	USPAT	OR	OFF	2021/08/03 06:55
L6	24	L5 and assay	USPAT	OR	OFF	2021/08/03 06:55
L7	14	L6 and "Zika virus".clm.	USPAT	OR	OFF	2021/08/03 06:55
L8	0	L7 and "microneutralization assay".clm.	USPAT	OR	OFF	2021/08/03 06:55
L9	0	L8	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2021/08/03 06:55

FORM PTO-1449/A and B (modified PTO/SB/08) INFORMATION DISCLOSURE STATEMENT BY APPLICANT				APPLICATION NO.: 16/813,862		ATTY. DOCKET NO.: I0422.70125US01	
				FILING DATE: March 10, 2020		CONFIRMATION NO.: 9700	
				FIRST NAMED INVENTOR: Jana Barbero Calzado			
				GROUP ART UNIT: 1648		EXAMINER: B. A. Chestnut	
Sheet	1	of	1				

U.S. PATENT DOCUMENTS

Examiner's Initials #	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication or Issue of Cited Document MM-DD-YYYY
		Number	Kind Code		
		10,744,194	B2	Barbero Calzado et al.	08-18-2020
		10,537,630	B2	Barbero Calzado et al.	01-21-2020
		2021-0093707	A1	Barbero Calzado et al.	04-01-2021

FOREIGN PATENT DOCUMENTS

Examiner's Initials #	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD- YYYY	Translation (Y/N)
		Office/ Country	Number	Kind Code			

OTHER ART - NON PATENT LITERATURE DOCUMENTS

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
		[NO AUTHOR LISTED] GenBank Accession No. AY632535. Zika virus strain MR 766, complete genome. November 23, 2010. 4 pages.	
		ATHMARAM et al., A two step purification strategy for Chikungunya virions purification using sucrose buoyant density gradient separation. J Virology Res. 2013;2(1):18-21.	
		AUBRY et al., Inactivation of Zika virus in plasma with amotosalen and ultraviolet A illumination. Transfusion. 2016 Jan;56(1):33-40. doi: 10.1111/trf.13271. Epub 2015 Aug 18.	
		KONISHI et al., Studies on structural proteins of Chikungunya Virus. I. Separation of three species of proteins and their preliminary characterization. Microbiol Immunol. 1980;24(5):419-28. doi: 10.1111/j.1348-0421.1980.tb02846.x.	
		KUNO et al., Full-length sequencing and genomic characterization of Bagaza, Kedougou, and Zika viruses. Arch Virol. 2007;152(4):687-696. doi:10.1007/s00705-006-0903-z.	
		TIWARI et al., Assessment of immunogenic potential of Vero adapted formalin inactivated vaccine derived from novel ECSA genotype of Chikungunya virus. Vaccine. 2009 Apr 21;27(18):2513-22. doi: 10.1016/j.vaccine.2009.02.062. Epub 2009 Feb 27.	

[NOTE - No copies of U.S. patents, published U.S. patent applications, or pending, unpublished patent applications stored in the USPTO's Image File Wrapper (IFW) system, are included. See 37 CFR § 1.98 and 1287OG163. Copies of all other patent(s), publication(s), unpublished, pending U.S. patent applications, or other information listed are provided as required by 37 CFR § 1.98 unless 1) such copies were provided in an IDS in an earlier application that complies with 37 CFR § 1.98, and 2) the earlier application is relied upon for an earlier filing date under 35 U.S.C. § 120.]

EXAMINER:	DATE CONSIDERED:
/BARRY A CHESTNUT/	08/03/2021

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	4	Barbero near2 calzado.inv.	USPAT	OR	OFF	2021/08/03 06:57
L2	4	nebenfuhr near2 mario.inv.	USPAT	OR	OFF	2021/08/03 06:57
L3	15	schlegl near2 robert.inv.	USPAT	OR	OFF	2021/08/03 06:57
L4	466	weber near2 michael.inv.	USPAT	OR	OFF	2021/08/03 06:57
L5	4	heindl near2 wruss near2 jurgen.inv.	USPAT	OR	OFF	2021/08/03 06:57
L6	470	L1 or L2 or L3 or L4 or L5	USPAT	OR	OFF	2021/08/03 06:57
L7	470	L6	USPAT	OR	OFF	2021/08/03 06:57
L8	73	"zika virus" and RNA.clm.	USPAT	OR	OFF	2021/08/03 06:57
L9	8	L8 and "antibody titer".clm.	USPAT	OR	OFF	2021/08/03 06:57
L10	0	L9 and "microneutralization assay".clm.	USPAT	OR	OFF	2021/08/03 06:57
L11	0	L10	USPAT	OR	OFF	2021/08/03 06:57

180 sequences selected

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Zika virus strain H/PF/2013, complete genome

Sequence ID: KJ775791.2 Length: 10867 Number of Matches: 1

Range 1: 21 to 10773 GenBank Graphics

1 item Match 4 Unseen Match

Score	Expect	Identities	Gaps	Strand
19995 bits(10773)	5.5	10773/10773(100%)	0/10773(0%)	Plus/Plus
Query 1	CAGACTGCGACAGTTCTGAGTTTGABGCGAAGCTAGCAACAGTATCAACAGGTTTATTT	60		
Subject 21	CAGACTGCGACAGTTCTGAGTTTGABGCGAAGCTAGCAACAGTATCAACAGGTTTATTT	60		
Query 61	TGGATTGGAAACGAGATTTTCTGGTCATGAAACCCCAAAAGAAATCCGGAGGATTC	120		
Subject 81	TGGATTGGAAACGAGATTTTCTGGTCATGAAACCCCAAAAGAAATCCGGAGGATTC	140		
Query 121	CGGATTGTCATATGCTTAAACCGCGAGTATGCGCGCTTTGGGGGCTTGAAG	180		
Subject 141	CGGATTGTCATATGCTTAAACCGCGAGTATGCGCGCTTTGGGGGCTTGAAG	200		
Query 181	AGGCTGCGACGCGAGCTTCTGCTGGGTCATGGGCGCATCAGGATGCTCTGGGATTTTA	240		
Subject 201	AGGCTGCGACGCGAGCTTCTGCTGGGTCATGGGCGCATCAGGATGCTCTGGGATTTTA	260		
Query 241	GCGTTTTCGATATTCACGGCTATCAAGGCTATCTGCTGCTCATATAGATGCGGTTCA	300		
Subject 261	GCGTTTTCGATATTCACGGCTATCAAGGCTATCTGCTGCTCATATAGATGCGGTTCA	320		
Query 301	GTGGGAAAGAGAGGCTATGGAATATTAAGAACTTCAAGAAAGATCTGGCTGCCATG	360		
Subject 321	GTGGGAAAGAGAGGCTATGGAATATTAAGAACTTCAAGAAAGATCTGGCTGCCATG	380		
Query 361	CTGAGATATATCAATGCTAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	420		
Subject 381	CTGAGATATATCAATGCTAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	440		
Query 421	ATTGTTGGCTTCCTGCTGACACAGCTATGGCGCGGAGGCTCACTACAGCTGGGATGCA	480		
Subject 441	ATTGTTGGCTTCCTGCTGACACAGCTATGGCGCGGAGGCTCACTACAGCTGGGATGCA	500		
Query 481	TACTATATGTTACTTGGACAGAAACGCGCTGGGAGGCTATATCTTTTCCAACTACATTG	540		
Subject 501	TACTATATGTTACTTGGACAGAAACGCGCTGGGAGGCTATATCTTTTCCAACTACATTG	560		
Query 541	GGGATGAATAGTGTATATACAGATCATGGATCTTGGACACATGTGTGATGCCACATG	600		
Subject 561	GGGATGAATAGTGTATATACAGATCATGGATCTTGGACACATGTGTGATGCCACATG	620		
Query 601	AGCTATGATATGCCCTATGCTGGATGAGGGGCTGGAAACAGATGACGTCGATTTGGTGC	660		
Subject 621	AGCTATGATATGCCCTATGCTGGATGAGGGGCTGGAAACAGATGACGTCGATTTGGTGC	680		
Query 661	AACACGACGTGACCTTGGGTTTGTACGGAACCTGCTACACAAAGAGTGAAGCAGTG	720		
Subject 681	AACACGACGTGACCTTGGGTTTGTACGGAACCTGCTACACAAAGAGTGAAGCAGTG	740		
Query 721	AGATCTAGAAAGGCTGTGACGCTCCCTTCCATTCCCTAGGAGGCTGCAAAACGGCTCG	780		
Subject 741	AGATCTAGAAAGGCTGTGACGCTCCCTTCCATTCCCTAGGAGGCTGCAAAACGGCTCG	800		
Query 761	CAAACCTGTTGGGATCAAGGGAATACACAAAGCACTTGATTAGATCGAAATTTGGATA	840		
Subject 801	CAAACCTGTTGGGATCAAGGGAATACACAAAGCACTTGATTAGATCGAAATTTGGATA	860		

Bibliographic Data

Application No: 16/813,862

Foreign Priority claimed: ☒ Yes ☐ No

35 USC 119 (a-d) conditions met: ☒ Yes ☐ No ☐ Met After Allowance

Verified and Acknowledged: /BARRY A CHESTNUT/

Examiner's Signature

Initials

Title: ZIKA VIRUS VACCINE

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
03/10/2020	424	1648	I0422.70125US01
RULE			

APPLICANTS

Valneva Austria GmbH, Vienna, AUSTRIA

INVENTORS

Jana Barbero Calzado, Vienna, AUSTRIA

Mario Nebenführ, Vienna, AUSTRIA

Robert Schlegl, Siegenfeld, AUSTRIA

Michael Weber, Vienna, AUSTRIA

Jürgen Heindl-Wruss, Vienna, AUSTRIA

CONTINUING DATA

This application is a CON of 16063007 06/15/2018 PAT 10639365

16063007 is a 371 of PCT/EP2016/082664 12/23/2016

FOREIGN APPLICATIONS

EPO EP15202585.4 12/23/2015

EPO EP16161068.8 03/18/2016

EPO EP16176049.1 06/23/2016

EPO EP16176025.1 06/23/2016

EPO EP16182845.4 08/04/2016

IF REQUIRED, FOREIGN LICENSE GRANTED**

04/21/2020

STATE OR COUNTRY

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BOSTON, MA 02210-2206

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FILING FEE RECEIVED

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**Courtesy Reminder for
Application Serial No: 16/813,862**

Attorney Docket No: I0422.70125US01

Customer Number: 23628

Date of Electronic Notification: 08/11/2021

This is a courtesy reminder that new correspondence is available for this application. If you have not done so already, please review the correspondence. The official date of notification of the outgoing correspondence will be indicated on the form PTOL-90 accompanying the correspondence.

An email notification regarding the correspondence was sent to the following email address(es) associated with your customer number:

Patents_eOfficeAction@WolfGreenfield.com

WGS_eOfficeAction@WolfGreenfield.com

To view your correspondence online or update your email addresses, please visit us anytime at **<https://ppair-my.uspto.gov/pair/PrivatePair>**.

If you have any questions, please email the Electronic Business Center (EBC) at EBC@uspto.gov or call 1-866-217-9197.

FORM PTO-1449/A and B (modified PTO/SB/08) INFORMATION DISCLOSURE STATEMENT BY APPLICANT				APPLICATION NO.: 16/813,862		ATTY. DOCKET NO.: I0422.70125US01	
				FILING DATE: March 10, 2020		CONFIRMATION NO.: 9700	
				FIRST NAMED INVENTOR: Jana Barbero Calzado			
				GROUP ART UNIT: 1648		EXAMINER: B. A. Chestnut	
Sheet	1	of	1				

U.S. PATENT DOCUMENTS

Examiner's Initials #	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication or Issue of Cited Document MM-DD-YYYY
		Number	Kind Code		

FOREIGN PATENT DOCUMENTS

Examiner's Initials #	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD- YYYY	Translation (Y/N)
		Office/ Country	Number	Kind Code			

OTHER ART – NON PATENT LITERATURE DOCUMENTS

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
		Third Party Observations filed in Opposition to EP 16828746.4, filed on October 13, 2021. 6 pages.	

[NOTE – No copies of U.S. patents, published U.S. patent applications, or pending, unpublished patent applications stored in the USPTO's Image File Wrapper (IFW) system, are included. See 37 CFR § 1.98 and 1287OG163. Copies of all other patent(s), publication(s), unpublished, pending U.S. patent applications, or other information listed are provided as required by 37 CFR § 1.98 unless 1) such copies were provided in an IDS in an earlier application that complies with 37 CFR § 1.98, and 2) the earlier application is relied upon for an earlier filing date under 35 U.S.C. § 120.]

EXAMINER:	DATE CONSIDERED:
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* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Electronic Patent Application Fee Transmittal

Application Number:	16813862			
Filing Date:	10-Mar-2020			
Title of Invention:	ZIKA VIRUS VACCINE			
First Named Inventor/Applicant Name:	Jana Barbero Calzado			
Filer:	Chelsea E. Witte-Garcia/Rasema Muhovic			
Attorney Docket Number:	I0422.70125US01			
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
SUBMISSION- INFORMATION DISCLOSURE STMT	1806	1	260	260
Total in USD (\$)				260

Electronic Acknowledgement Receipt

EFS ID:	44104395
Application Number:	16813862
International Application Number:	
Confirmation Number:	9700
Title of Invention:	ZIKA VIRUS VACCINE
First Named Inventor/Applicant Name:	Jana Barbero Calzado
Customer Number:	23628
Filer:	Chelsea E. Witte-Garcia/Rasema Muhovic
Filer Authorized By:	Chelsea E. Witte-Garcia
Attorney Docket Number:	I0422.70125US01
Receipt Date:	22-OCT-2021
Filing Date:	10-MAR-2020
Time Stamp:	17:25:44
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$ 260
RAM confirmation Number	E20210LH26591255
Deposit Account	232825
Authorized User	Rasema Muhovic

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:
37 CFR 1.17 (Patent application and reexamination processing fees)

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Miscellaneous Incoming Letter	I042270125US01-TRN-CEW.pdf	26286	no	1
			3ebd30ddb8a880d7ba48ad1005c7337beb a7ef86		
Warnings:					
Information:					
2	Fee Worksheet (SB06)	I042270125US01-FEE-CEW.pdf	32729	no	1
			62b0c957be52c3b6020ebc1b84c082e470c 7b671		
Warnings:					
Information:					
3	Patent Term Adjustment Stmt Under 37CFR1.704(d)	I042270125US01-IDSPTA-CEW. pdf	63317	no	1
			473a5a4abd82f23633e4145edc07f3f33f0d 103b		
Warnings:					
Information:					
4	Letter specifying the conditions for filing under 37CFR1.97	I042270125US01-IDSBODY-CEW.pdf	28993	no	3
			2810bc4548e4b48eab6fda17318dcae089f 62e55		
Warnings:					
Information:					
5	Information Disclosure Statement (IDS) Form (SB08)	I042270125US01-IDS1449-CEW.pdf	20933	no	1
			d2f7f68d528ab67c3ce09826eee750ddb43 d01d4		
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
6	Other Reference-Patent/App/Search documents	EP16828746_TPO_filed_10-13-2021.pdf	798756	no	6
			e6ff9fc245e091d903769fd0fe09170f34e46f 84		
Warnings:					

Information:					
7	Fee Worksheet (SB06)	fee-info.pdf	38315	no	2
			2d2fa12263f09f752f6e0df5d7c8f0d5e5b7c7dc		
Warnings:					
Information:					
Total Files Size (in bytes):				1009329	
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					

TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i>	Application Number	16/813,862-Conf. #9700
	Filing Date	March 10, 2020
	First Named Inventor	Jana Barbero Calzado
	Art Unit	1648
	Examiner Name	B. A. Chestnut
Total Number of Pages in This Submission	Attorney Docket Number	I0422.70125US01

ENCLOSURES (Check all that apply)			
☒ Fee Transmittal Form ☐ Fee Attached ☐ Amendment/Reply ☐ After Final ☐ Affidavits/declaration(s) ☐ Extension of Time Request ☐ Express Abandonment Request ☒ Information Disclosure Statement ☐ Certified Copy of Priority Document(s) ☐ Reply to Missing Parts/ Incomplete Application ☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53	☐ Drawing(s) ☐ Licensing-related Papers ☐ Petition ☐ Petition to Convert to a Provisional Application ☐ Power of Attorney, Revocation Change of Correspondence Address ☐ Terminal Disclaimer ☐ Request for Refund ☐ CD, Number of CD(s) _____ ☐ Landscape Table on CD	☐ After Allowance Communication to TC ☐ Appeal Communication to Board of Appeals and Interferences ☐ Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) ☐ Proprietary Information ☐ Status Letter ☒ Other Enclosure(s) (please Identify below): Form PTO-1449 Form PTO-SB-133 Copy of cited reference	
<table border="1"><tr><td>Remarks</td></tr></table>			Remarks
Remarks			

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	WOLF, GREENFIELD & SACKS, P.C.		
Signature	/Chelsea E. Witte-Garcia/		
Printed name	Chelsea E. Witte-Garcia, Ph.D.		
Date	October 22, 2021	Reg. No.	75,713

Certificate of Electronic Filing under 37 C.F.R. § 1.8	
I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office's electronic filing system in accordance with 37 C.F.R. § 1.6(a)(4).	
Dated: October 22, 2021	Electronic Signature for Rasema Muhovic: /Rasema Muhovic/

FEE TRANSMITTAL		Complete if known	
		Application Number	16/813,862-Conf. #9700
		Filing Date	March 10, 2020
☐ Applicant asserts small entity status. See 37 CFR 1.27.		First Named Inventor	Jana Barbero Calzado
☐ Applicant certifies micro entity status. See 37 CFR 1.29. Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.		Examiner Name	B. A. Chestnut
		Art Unit	1648
TOTAL AMOUNT OF PAYMENT	(\$) 260.00	Practitioner Docket No.	10422.70125US01

METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☒ Deposit Account Deposit Account Number: 23/2825 Deposit Account Name: Wolf, Greenfield & Sacks, P.C.

For the above-identified deposit account, the Director is hereby authorized to (check all that apply):

☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, **except for the filing fee**

☒ Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17, **except for any excess claims fees or multiple dependent claim fee** ☐ Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17

☒ Credit any overpayment of fee(s)

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES (U = undiscounted fee; S = small entity fee; M = micro entity fee)

Application Type	FILING FEES			SEARCH FEES			EXAMINATION FEES			Fees Paid (\$)
	U (\$)	S (\$)	M (\$)	U (\$)	S (\$)	M (\$)	U (\$)	S (\$)	M (\$)	
Utility	320	160*	80	700	350	175	800	400	200	
Design	220	110	55	160	80	40	640	320	160	
Plant	220	110	55	440	220	110	660	330	165	
Reissue	320	160	80	700	350	175	2,320	1,160	580	
Provisional	300	150	75	0	0	0	0	0	0	

* The \$160 small entity status filing fee for a utility application is further reduced to \$80 for a small entity status applicant who files the application via EFS-Web.

2. EXCESS CLAIM FEES

Fee Description	Undiscounted Fee (\$)	Small Entity Fee (\$)	Micro Entity Fee (\$)
Each claim over 20 (including Reissues)	100	50	25
Each independent claim over 3 (including Reissues)	480	240	120
Multiple dependent claims	860	430	215

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims
_____ - 26 or HP = _____	x _____	= _____		Fee (\$)
HP = highest number of total claims paid for, if greater than 20.				Fee Paid (\$)

Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
_____ - 3 or HP = _____	x _____	= _____	
HP = highest number of independent claims paid for, if greater than 3.			

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$420 (\$210 for small entity) (\$105 for micro entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
_____ - 100 = _____	/50 = _____	(round up to a whole number) x _____	= _____	

4. OTHER FEE(S)

Non-English specification, \$130 fee (no small or micro entity discount)

Non-electronic filing fee under 37 CFR 1.16(t) for a utility application, \$400 fee (\$200 small or micro entity)

Other (e.g., late filing surcharge): 1806 Submission of an Information Disclosure Statement 260.00

SUBMITTED BY			
Signature	/Chelsea E. Witte-Garcia/	Registration No. (Attorney/Agent)	75,713
Name (Print/Type)	Chelsea E. Witte-Garcia, Ph.D.	Telephone	617.646.8000
		Date	October 22, 2021

Certificate of Electronic Filing under 37 C.F.R. § 1.8	
I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office's electronic filing system in accordance with 37 C.F.R. § 1.6(a)(4).	
Dated: October 22, 2021	Electronic Signature for Rasema Muhovic: /Rasema Muhovic/

**PATENT TERM ADJUSTMENT
STATEMENT UNDER 37 CFR 1.704(d)**

Application Number	16/813,862-Conf. #9700
Filing Date	March 10, 2020
First Named Inventor	Jana Barbero Calzado
Art Unit	1648
Examiner Name	B. A. Chestnut
Practitioner Docket No.	I0422.70125US01

APPLICANT HEREBY STATES THE FOLLOWING (please review 37 CFR 1.704(d) before filing this form):

☒ Each item of information contained in the information disclosure statement was first cited in any communication from a patent office in a counterpart foreign or international application or from the Office, and this communication was not received by any individual designated in 37 CFR 1.56(c) more than thirty days prior to the filing of the information disclosure statement.

AND/OR

☐ Each item of information contained in the information disclosure statement is a communication that was issued by a patent office in a counterpart foreign or international application or by the Office, and this communication was not received by any individual designated in 37 CFR 1.56(c) more than thirty days prior to the filing of the information disclosure statement.

INSTRUCTIONS:

- **This form will not satisfy the requirement of 37 CFR 1.97(e).** The present statement is filed under 37 CFR 1.704(d) and will not substitute for compliance with any of the requirements of 37 CFR 1.97 and 1.98. For an information disclosure statement to comply with 37 CFR 1.97(c) or (d), the information disclosure statement must be accompanied by a statement under 37 CFR 1.97(e) notwithstanding any statement filed under 37 CFR 1.704(d).
- The present form (PTO/SB/133) should be filed concurrently with the information disclosure statement to derive benefit under 37 CFR 1.704(d).

Signature	/Chelsea E. Witte-Garcia/	Date	October 22, 2021
Typed or printed name	Chelsea E. Witte-Garcia, Ph.D.	Practitioner Registration Number	75,713

Note: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required in accordance with 37 CFR 1.33 and 11.18. Please see 37 CFR 1.4(d) for the form of the signature. If necessary, submit multiple forms for more than one signature, see below*.

☐ *Total of 1 forms are submitted.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Certificate of Electronic Filing under 37 C.F.R. § 1.8

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office's electronic filing system in accordance with 37 C.F.R. § 1.6(a)(4).

Dated: October 22, 2021

Electronic Signature for Rasema Muhovic: /Rasema Muhovic/

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor: Jana Barbero Calzado
Application No.: 16/813,862
Confirmation No.: 9700
Filed: March 10, 2020
For: ZIKA VIRUS VACCINE
Examiner: B. A. Chestnut
Art Unit: 1648

Certificate of Electronic Filing under 37 C.F.R. § 1.8

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office's electronic filing system in accordance with 37 C.F.R. § 1.6(a)(4).

Dated: October 22, 2021

Electronic Signature for Rasema Muhovic: /Rasema Muhovic/

MAIL STOP AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**STATEMENT FILED PURSUANT TO THE DUTY OF
DISCLOSURE UNDER 37 C.F.R. §§ 1.56, 1.97 AND 1.98**

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. §§ 1.56, 1.97 and 1.98, the undersigned requests consideration of this Information Disclosure Statement.

PART I: Compliance with 37 C.F.R. § 1.97

This Information Disclosure Statement has been filed after the mailing date of either a Final Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311 and is being filed on or before payment of an Issue Fee.

The undersigned hereby states, as specified in 37 C.F.R. § 1.97(e), that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.

Please charge our Credit Card in the amount of \$260.00 covering the fee set forth in 37 C.F.R. § 1.17(p).

PART II: Compliance with 37 C.F.R. § 1.704(d)

Each item of information contained in this Information Disclosure Statement

(i) was first cited in any communication from a patent office in a counterpart foreign or international application or from the United States Patent and Trademark Office, and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty (30) days prior to the filing of the Information Disclosure Statement; or

(ii) is a communication that was issued by a patent office in a counterpart foreign or international application or by the United States Patent and Trademark Office, and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty (30) days prior to the filing of the Information Disclosure Statement.

PART II: Information Cited

The undersigned hereby makes of record in the above-identified application the information listed on the attached form PTO-1449 (modified PTO/SB/08). The order of presentation of the references should not be construed as an indication of the importance of the references.

PART III: Remarks

Documents cited anywhere in the Information Disclosure Statement are enclosed unless otherwise indicated. It is respectfully requested that:

1. The Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims;
2. The enclosed form PTO-1449 (modified PTO/SB/08) be signed by the Examiner to evidence that the cited information has been fully considered by the United States Patent and Trademark Office during the examination of this application;
3. The citations for the information be printed on any patent which issues from this application.

By submitting this Information Disclosure Statement, the undersigned makes no representation that a search has been performed, of the extent of any search performed, or that more relevant information does not exist.

By submitting this Information Disclosure Statement, the undersigned makes no representation that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

By submitting this Information Disclosure Statement, the undersigned makes no representation that the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. § 102, or an admission by Applicant as prior art.

Notwithstanding any statements by the undersigned, the Examiner is urged to form his or her own conclusion regarding the relevance of the cited information.

An early and favorable action is hereby requested.

The Director is hereby authorized to charge any deficiency or credit any overpayment in the fees occasioned by the filing of this Information Disclosure Statement to our Deposit Account No. 23/2825 under Docket No. I0422.70125US01 from which the undersigned is authorized to draw.

Respectfully submitted,

Electronic signature: /Chelsea E. Witte-Garcia/
Chelsea E. Witte-Garcia, Ph.D.
Registration No.: 75,713
WOLF, GREENFIELD & SACKS, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
617.646.8000

Docket No.: I0422.70125US01
Date: October 22, 2021

TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i>	Application Number	16/813,862-Conf. #9700
	Filing Date	March 10, 2020
	First Named Inventor	Jana Barbero Calzado
	Art Unit	1648
	Examiner Name	B. A. Chestnut
Total Number of Pages in This Submission	Attorney Docket Number	I0422.70125US01

ENCLOSURES (Check all that apply)			
☐ Fee Transmittal Form ☐ Fee Attached ☐ Amendment/Reply ☐ After Final ☐ Affidavits/declaration(s) ☐ Extension of Time Request ☐ Express Abandonment Request ☐ Information Disclosure Statement ☐ Certified Copy of Priority Document(s) ☐ Reply to Missing Parts/ Incomplete Application ☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53	☐ Drawing(s) ☐ Licensing-related Papers ☐ Petition ☐ Petition to Convert to a Provisional Application ☐ Power of Attorney, Revocation Change of Correspondence Address ☐ Terminal Disclaimer ☐ Request for Refund ☐ CD, Number of CD(s) _____ ☐ Landscape Table on CD	☐ After Allowance Communication to TC ☐ Appeal Communication to Board of Appeals and Interferences ☐ Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) ☐ Proprietary Information ☐ Status Letter ☒ Other Enclosure(s) (please Identify below): -Part B – Fee(s) Transmittal	
<table border="1"><tr><td>Remarks</td></tr></table>			Remarks
Remarks			

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	WOLF, GREENFIELD & SACKS, P.C.		
Signature	/Chelsea E. Witte-Garcia/		
Printed name	Chelsea E. Witte-Garcia, Ph.D.		
Date	November 10, 2021	Reg. No.	75,713

Certificate of Electronic Filing under 37 C.F.R. § 1.8	
I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office's electronic filing system in accordance with 37 C.F.R. § 1.6(a)(4).	
Dated: November 10, 2021	Electronic Signature for Katelyn R. Farmer: /Katelyn R. Farmer/

PART B—FEE(S) TRANSMITTAL

Complete and send this form, together with the applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

By fax, send to: (571) 273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

WOLF, GREENFIELD & SACKS, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2206

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

Katelyn R. Farmer	(Typed or printed name)
/Katelyn R. Farmer/	(Signature)
November 10, 2021	(Date)

APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO
16/813,862	03/10/2020	Jana Barbero Calzado	I0422.70125US01	9700

TITLE OF INVENTION: ZIKA VIRUS VACCINE

APPLN: TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$1200	\$0.00	\$0.00	\$1200	11/12/2021

EXAMINER	ART UNIT	CLASS-SUBCLASS
B. A. Chestnut	1648	424-218100

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363) ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-09 or more recent) attached. Use of a Customer Number is required.	2. For printing on the patent front page, list (1) The names of up to 3 registered patent attorneys or agents OR, alternatively, (2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.	1. Wolf, Greenfield & Sacks, P.C. 2. 3.
--	--	--

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE or COUNTRY)

Valneva Austria GmbH

Vienna, Austria

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. Fees Submitted: ☒ Issue Fee ☐ Publication Fee (if required) ☐ Advance Order - # of Copies _____

4b. Method of Payment (Please first reapply any previously paid fee shown above):

☒ Electronic Payment via EFS-Web ☐ Enclosed check ☐ Non-electronic payment by credit card (Attach form PTO-2038)

☒ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. 23/2825

5. Change of Entity Status (from status indicated above)

☐ Applicant certifying micro entity status. See 37 CFR 1.29.

NOTE: Absent a valid Certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

☐ Applicant asserting small entity status. See 37 CFR 1.27.

NOTE: If the application was previously under micro entity status, checking this box will be taken as a notification of loss of entitlement to micro entity status.

☐ Applicant changing to regular undiscounted fee status.

NOTE: Checking this box will be taken as a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature /Chelsea E. Witte-Garcia/

Date November 10, 2021

Typed or printed name Chelsea E. Witte-Garcia, PhD

Registration No. 75,713

Electronic Patent Application Fee Transmittal

Application Number:	16813862			
Filing Date:	10-Mar-2020			
Title of Invention:	ZIKA VIRUS VACCINE			
First Named Inventor/Applicant Name:	Jana Barbero Calzado			
Filer:	Chelsea E. Witte-Garcia/Katelyn Farmer			
Attorney Docket Number:	I0422.70125US01			
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
UTILITY APPL ISSUE FEE	1501	1	1200	1200

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				1200

Electronic Acknowledgement Receipt

EFS ID:	44245850
Application Number:	16813862
International Application Number:	
Confirmation Number:	9700
Title of Invention:	ZIKA VIRUS VACCINE
First Named Inventor/Applicant Name:	Jana Barbero Calzado
Customer Number:	23628
Filer:	Chelsea E. Witte-Garcia/Katelyn Farmer
Filer Authorized By:	Chelsea E. Witte-Garcia
Attorney Docket Number:	I0422.70125US01
Receipt Date:	10-NOV-2021
Filing Date:	10-MAR-2020
Time Stamp:	09:35:45
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$ 1200
RAM confirmation Number	E2021A0036151226
Deposit Account	232825
Authorized User	Katelyn Farmer

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.17 (Patent application and reexamination processing fees)

37 CFR 1.16 (National application filing, search, and examination fees)

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Miscellaneous Incoming Letter	I042270125US01-TRN-CEW.pdf	25998	no	1
			7d87279546d0a6bb9598ed6600501c7b21ab4585		
Warnings:					
Information:					
2	Issue Fee Payment (PTO-85B)	I042270125US01-ISSFEE-CEW.pdf	36819	no	1
			2b2e88acd0fc35a9c2ef301a534b6450df83937d		
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	38055	no	2
			7925f5355529d9a5d301ff6ab0464ffb63051c50		
Warnings:					
Information:					
Total Files Size (in bytes):			100872		
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/813,862	03/10/2020	Jana Barbero Calzado	I0422.70125US01	9700
23628	7590	11/24/2021	EXAMINER	
WOLF GREENFIELD & SACKS, P.C.			CHESTNUT, BARRY A	
600 ATLANTIC AVENUE			ART UNIT	PAPER NUMBER
BOSTON, MA 02210-2206			1648	
			NOTIFICATION DATE	DELIVERY MODE
			11/24/2021	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patents_eOfficeAction@WolfGreenfield.com
WGS_eOfficeAction@WolfGreenfield.com

Corrected Notice of Allowability	Application No. 16/813,862	Applicant(s) Barbero Calzado et al.	
	Examiner Barry Chestnut	Art Unit 1648	AIA (FITF) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 07/23/2021.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on ____.

2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.

3. ☒ The allowed claim(s) is/are 18-43. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a) ☒ All b) ☐ Some* c) ☐ None of the:

1. ☒ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. ____.

3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892) 2. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date <u>10/22/2021</u> . 3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material _____. 4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.	5. ☐ Examiner's Amendment/Comment 6. ☐ Examiner's Statement of Reasons for Allowance 7. ☐ Other _____.
---	---

/BARRY A CHESTNUT/ Primary Examiner, Art Unit 1648	
---	--

Issue Classification 	Application/Control No. 16/813,862	Applicant(s)/Patent Under Reexamination Barbero Calzado et al.
	Examiner Barry Chestnut	Art Unit 1648

CPC						
Symbol					Type	Version
A61K	/	39	/	12	F	2013-01-01
A61P	/	31	/	14	I	2018-01-01
C07K	/	14	/	1825	I	2013-01-01
C12N	/	7	/	02	I	2013-01-01
C12N	/	7	/	06	I	2013-01-01
C12N	/	7	/	00	I	2013-01-01
A61K	/	39	/	39	I	2013-01-01
C07K	/	14	/	18	I	2013-01-01
A61K	/	2039	/	5252	A	2013-01-01
C12N	/	2770	/	24134	A	2013-01-01
C12N	/	2770	/	24151	A	2013-01-01
C12N	/	2770	/	24163	A	2013-01-01
Y02A	/	50	/	30	A	2018-01-01
A61K	/	2039	/	5258	A	2013-01-01
A61K	/	2039	/	5254	A	2013-01-01
A61K	/	2039	/	55505	A	2013-01-01

CPC Combination Sets				
Symbol	Type	Set	Ranking	Version
/				

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	26	
/BARRY A CHESTNUT/ Primary Examiner, Art Unit 1648	17 November 2021	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	None

Issue Classification 	Application/Control No. 16/813,862	Applicant(s)/Patent Under Reexamination Barbero Calzado et al.
	Examiner Barry Chestnut	Art Unit 1648

INTERNATIONAL CLASSIFICATION					
CLAIMED					
A61K	/	39	/	00	
A61K	/	39	/	12	
C12N	/	7	/	00	
A61K	/	39	/	39	
A61K	/	9	/	00	
NON-CLAIMED					
	/		/		

US ORIGINAL CLASSIFICATION	
CLASS	SUBCLASS

CROSS REFERENCES(S)						
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)					

NONE (Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 26	
/BARRY A CHESTNUT/ Primary Examiner, Art Unit 1648 (Primary Examiner) _____ (Date) _____		17 November 2021 O.G. Print Claim(s) 1	O.G. Print Figure None

Issue Classification 	Application/Control No. 16/813,862	Applicant(s)/Patent Under Reexamination Barbero Calzado et al.
	Examiner Barry Chestnut	Art Unit 1648

☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47															
CLAIMS															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original

NONE (Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 26	
/BARRY A CHESTNUT/ Primary Examiner, Art Unit 1648 (Primary Examiner) _____ (Date) 17 November 2021		O.G. Print Claim(s) 1	O.G. Print Figure None

<i>Search Notes</i> 	Application/Control No. 16/813,862	Applicant(s)/Patent Under Reexamination Barbero Calzado et al.
	Examiner Barry Chestnut	Art Unit 1648

CPC - Searched*		
Symbol	Date	Examiner
A61K39/12,C12N2770/24134,Y02A50/30,C12N7/00,A61K2039/53	04/21/2021	BC / AU 1648

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
Inventor search- Barbero, C., Nebenfuhr, M., Schlegl, R., Weber, M., Heindl-Wruss, J. (PALM/EAST all inventors)	04/21/2021	BC / AU 1648
NPL search-attached- Google Scholar	04/21/2021	BC / AU 1648
Updated inventor search- Barbero, C., Nebenfuhr, M., Schlegl, R., Weber, M., Heindl-Wruss, J. (PALM/EAST all inventors)	08/03/2021	BC / AU 1648

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner
US PGPUB		04/21/2021	BC / AU 1648
UPAD		04/21/2021	BC / AU 1648
NCBI BLAST	SEQ ID NO: 72 (see attached Blast PDF)	04/21/2021	BC / AU 1648

/BARRY A CHESTNUT/ Primary Examiner, Art Unit 1648	11/17/2021
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<i>Search Notes</i> 	Application/Control No. 16/813,862	Applicant(s)/Patent Under Reexamination Barbero Calzado et al.
	Examiner Barry Chestnut	Art Unit 1648

/BARRY A CHESTNUT/ Primary Examiner, Art Unit 1648	11/17/2021
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FORM PTO-1449/A and B (modified PTO/SB/08) INFORMATION DISCLOSURE STATEMENT BY APPLICANT				APPLICATION NO.: 16/813,862		ATTY. DOCKET NO.: I0422.70125US01	
				FILING DATE: March 10, 2020		CONFIRMATION NO.: 9700	
				FIRST NAMED INVENTOR: Jana Barbero Calzado			
				GROUP ART UNIT: 1648		EXAMINER: B. A. Chestnut	
Sheet	1	of	1				

U.S. PATENT DOCUMENTS

Examiner's Initials #	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication or Issue of Cited Document MM-DD-YYYY
		Number	Kind Code		

FOREIGN PATENT DOCUMENTS

Examiner's Initials #	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD- YYYY	Translation (Y/N)
		Office/ Country	Number	Kind Code			

OTHER ART – NON PATENT LITERATURE DOCUMENTS

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
		Third Party Observations filed in Opposition to EP 16828746.4, filed on October 13, 2021. 6 pages.	

[NOTE – No copies of U.S. patents, published U.S. patent applications, or pending, unpublished patent applications stored in the USPTO's Image File Wrapper (IFW) system, are included. See 37 CFR § 1.98 and 1287OG163. Copies of all other patent(s), publication(s), unpublished, pending U.S. patent applications, or other information listed are provided as required by 37 CFR § 1.98 unless 1) such copies were provided in an IDS in an earlier application that complies with 37 CFR § 1.98, and 2) the earlier application is relied upon for an earlier filing date under 35 U.S.C. § 120.]

EXAMINER: /BARRY A CHESTNUT/	DATE CONSIDERED: 11/17/2021
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* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

9715664.1



APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/813,862	01/11/2022	11219681	I0422.70125US01	9700

23628 7590 12/21/2021
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ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

INVENTOR(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional inventors):

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