IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	18/349,707	Conf. No.: 7622
Inventor(s)	:	David Benjamin Turitz Cox et al.	
Filed	:	July 10, 2023	
Art Unit	:	1652	
Examiner	:	Richard G. Hutson	
Customer No.	:	198696	
Docket No.	:	BROD-2780US-CON	
Title	:	NOVEL CAS13B ORTHOLOGUES CRISPR ENZYMES AND SYSTEMS	

AMENDMENT AND RESPONSE

FILED VIA EFS-WEB

Commissioner:

In response to the Final Office Action mailed May 28, 2025 ("Office Action"), please enter and consider the following amendments and remarks.

Certificate of EFS-WEB Transmission pursuant to 37 C.F.R. § 1.8

I hereby certify that this correspondence is being transmitted via the U.S. Patent and Trademark Office electronic filing system (EFS-Web) to the USPTO, on August 27, 2025.

/Christopher D. Southgate/

Christopher D. Southgate, Ph.D., J.D.

Reg. No. 54,875

AMENDMENT

In the Claims

Please amend the claims as follows. This listing of claims will replace all prior versions and listings of claims in this application.

1–50. (Canceled)

51. (Currently amended) [[A]] An engineered composition for modifying a target RNA sequence, said engineered composition comprising:

(a) a Cas13b effector protein comprising any one of amino acid sequences of SEQ ID NO: 31-38, or a functional variant thereof, a homologue or an orthologue thereof,

(b) an engineered guide molecule capable of forming a complex with the Cas13b effector protein, and

(c) one or more heterologous functional domains,

wherein the one or more functional domains are heterologous to the CRISPR-Cas 13b protein,

wherein the engineered guide molecule ~~is capable of forming a CRISPR-Cas complex with the Cas13b effector protein and~~ comprises

i) a guide sequence that replaces a spacer sequence encoded by the naturally occurring guide RNA with a new sequence that reprograms the CRISPR-Cas complex to bind a new target RNA sequence, and ~~that directs sequence-specific binding to a target RNA sequence~~ other than a naturally occurring ~~Cas13b protospacer and that reprograms the CRISPR-Cas complex to bind said target RNA sequence,~~ and

ii) [[(b)]] a direct repeat sequence,

wherein the engineered guide RNA can direct sequence-specific binding of the complex to the new target RNA sequence.

~~one or more heterologous functional domains modifies the target RNA sequence, wherein the one or more heterologous functional domains of (c) are associated with the Cas13b~~

~~effector protein of (a), and wherein the engineered composition is substantially free from one or more nucleic acids and/or amino acid sequences with which the engineered guide molecule, the Cas13b effector protein, and/or the one or more heterologous functional domains are associated in nature.~~(Previously Presented) The engineered composition of claim 51, wherein the Cas13b effector protein is a catalytically inactive Cas13b effector protein.

52. (Currently amended) The engineered composition of claim 51, wherein the Cas13b effector protein comprises one or more mutations in a Cas 13b ~~two~~ HEPN domain[[s]].

53. (Currently amended) The engineered composition of claim 51, wherein the Cas13b effector protein comprises a mutation in one or more of positions ~~H121A, R1177A, or H1182A~~ R128A, H133A, R1056A, or H1060A of the Cas13b effector protein of SEQ ID NO: ~~65~~ 32, or at analogous amino acid positions ~~corresponding thereto of~~ in a Cas13b ortholog.

54. (Previously Presented) The engineered composition of claim 51, wherein the Cas13b effector protein is truncated.

55. (Previously Presented) The engineered composition of claim 55, wherein the Cas13b effector protein is a truncated functional variant of a corresponding wild type Cas13b effector protein.

56. (Previously Presented) The engineered composition of claim 56, wherein the Cas13b effector protein corresponds to nucleotides 1-984 of *Prevotella* sp. P5-125 Cas13b.

57. (Previously Presented) The engineered composition of claim 55, wherein the Cas13b effector protein is catalytically inactive.

58. (Currently amended) The engineered composition of claim 51, wherein the engineered guide sequence hybridizes to a target RNA sequence comprising an adenine to form an RNA duplex, wherein the guide sequence comprises a non-pairing cytosine at a position corresponding to said adenine, resulting in an A-C mismatch in the RNA duplex formed.

59. (Currently amended) The engineered composition of claim 51, wherein the engineered guide sequence comprises more than one mismatch corresponding to different adenosine sites in the target RNA sequence, or wherein two guide molecules are used, each comprising a mismatch corresponding to a different adenosine site in the target RNA sequence.

60. (Previously Presented) The engineered composition of claim 51, wherein the one or more heterologous functional domains modifies the target RNA sequence by converting an adenosine to inosine.

61. (Currently amended) The engineered composition of claim 61, wherein the one or more heterologous functional domains ~~comprises~~ comprise an adenosine deaminase.

62. (Currently amended) The engineered composition of claim 62, wherein the adenosine deaminase is fused to ~~a~~ the N- or C-terminus of the Cas13b effector protein.

63. (Currently amended) The engineered composition of claim 63, wherein the adenosine deaminase is fused ~~by~~ to a linker.

64. (Previously Presented) The engineered composition of claim 64, wherein the linker is $(GGGGS)_{3-11}$, GSG_5, or SGSETPGTSESATPES (XTEN) (SEQ ID NO: 154).

65. (Previously Presented) The engineered composition of claim 62, wherein the adenosine deaminase is linked to an adaptor protein and the guide molecule.

66. (Currently amended) The engineered composition of claim 62, wherein the catalytically inactive Cas13b effector protein comprises an aptamer sequence capable of binding to an adaptor protein, wherein the adaptor protein is selected from any one of MS2, PP7, Qβ, F2, GA, fr, JP501, M12, R17, BZ13, JP34, JP500, KU1, M11, MX1, TW18, VK, SP, FI, ID2, NL95, TW19, AP205, ϕCb5, ϕCb8r, ϕCb12r, ϕCb23r, 7s, and PRR1.

67. (Previously Presented) The engineered composition of claim 62, wherein the adenosine deaminase is an RNA-specific adenosine deaminase or catalytic domain thereof.

68. (Currently amended) The engineered composition of claim 68, wherein the RNA-specific adenosine deaminase is an adenosine deaminase acting on RNA (ADAR) protein.

69. (Previously Presented) The engineered composition of claim 69, wherein the ADAR is human ADAR (huADAR) and/or ADAR1 or ADAR2, or a catalytic domain thereof.

70. (Previously Presented) The engineered composition of claim 70, wherein the ADAR is huADAR or a catalytic domain thereof.

71. (Previously Presented) The engineered composition of claim 69, wherein the ADAR is a mutated hADAR2d comprising mutation E488Q or a mutated hADAR1d comprising mutation E1008Q.

72. (Previously Presented) The engineered composition of claim 51, wherein the Cas13b effector protein comprises one or more heterologous nuclear export signals (NES) or nuclear localization signals (NLS).

73. (Previously Presented) The engineered composition of claim 73, wherein the NES is an HIV Rev NES or MAPK NES.

74. (Currently amended) The engineered composition of claim 73, wherein the heterologous NES or NLS is fused ~~at~~ to ~~a~~ the C-terminal of the Cas13b effector protein.

75. (Previously Presented) The engineered composition of claim 51, wherein the target RNA sequence is within a cell.

76. (Previously Presented) A cell comprising the engineered composition of claim 51.

77. (Previously Presented) The cell of claim 77, wherein the cell is a prokaryotic cell.

78. (Previously Presented) The cell of claim 77, wherein the cell is a eukaryotic cell.

79. (Previously Presented) The eukaryotic cell of claim 79, wherein the cell is a mammalian cell, a human cell, a non-human animal cell, or a plant cell.

80. (Previously Presented) A cell line comprising the cell of claim 79, or progeny thereof.

81. (Previously Presented) A non-human animal comprising the cell of any one of claims 79.

82. (Previously Presented) A plant comprising the cell of claim 79.

83. (Withdrawn) A method of prophylactically or therapeutically treating a subject in need thereof, comprising the engineered composition of claim 51.

84. (Withdrawn) A method of prophylactically or therapeutically treating a subject in need thereof, comprising the cell of claim 79.

85. (Withdrawn - Currently amended) A method of modifying a target RNA sequence, said method comprising delivering to said target RNA sequence an engineered composition comprising:

(a) a CRISPR-Cas13b effector protein comprising any one of the amino acid sequences of SEQ ID NO: 31-38, or a functional variant thereof, a homologue or an orthologue thereof,

(b) an engineered guide molecule (gRNA) capable of forming a complex with the Cas13b effector protein, and

(c) one or more heterologous functional domains bound to the CRISPR-Cas 13b-gRNA complex,

wherein the one or more functional domains are heterologous to the CRISPR-Cas 13b protein,

wherein the engineered guide molecule ~~is capable of forming a CRISPR-Cas complex with the Cas13b effector protein and~~ comprises

(i) a guide sequence that replaces a spacer sequence encoded by the naturally occurring guide RNA with a new sequence ~~that directs sequence-specific binding to a target RNA sequence other than a naturally occurring Cas13b protospacer and~~ that reprograms the CRISPR-Cas complex to bind ~~said~~ a new target RNA sequence, and

(~~b~~ii) a direct repeat sequence,

wherein the engineered guide RNA can direct sequence-specific binding of the complex to the new target RNA sequence.

~~wherein the one or more heterologous functional domains modifies the target RNA sequence,~~

~~wherein the target RNA sequence is in a prokaryotic cell or a eukaryotic cell,wherein the one or more heterologous functional domains are associated with the Cas13b effector protein,wherein the composition is substantially free from one or more nucleic acids and/or amino acid sequences with which the engineered guide molecule, the Cas13b effector protein, and/or the one or more heterologous functional domains in their native state.~~

86. (Withdrawn) The method of claim 86, wherein the one or more heterologous functional domains modifies the target RNA sequence by converting adenosine to inosine.

87. (Withdrawn) The method of claim 87, wherein the one or more heterologous functional domains comprises an adenosine deaminase.

88. (Withdrawn) The method of claim 88, wherein the Cas13b effector protein, engineered guide molecule, and a coding sequence of the adenosine deaminase, are delivered as one or more polynucleotide molecules or as a ribonucleoprotein complex.

89. (Withdrawn) The method of claim 89, wherein the Cas13b effector protein, engineered guide molecule, and coding sequence of the adenosine deaminase are delivered by means of particles, vesicles, or one or more viral vectors.

90. (New) The engineered composition of claim 51, wherein the one or more heterologous functional domains are covalently bound to the CRISPR-Cas 13b effector domain.

REMARKS

Status of the Claims

Claims 51–91 are pending, with claims 51 and 86 being independent. Claims 51, 53–54, 59–60, 62–64, 67, 69, 75, and 86 are amended. Claims 1–50 are canceled without prejudice or disclaimer as to the subject matter recited therein. Claims 84–90 are withdrawn pursuant to the Restriction Requirement of October 10, 2024. Claim 91 is new.

No new matter is added.

Claim Rejections under 35 U.S.C. § 101

Claims 51–53, 61, and 76–78 stand rejected under 35 U.S.C. § 101 as allegedly being directed to unpatentable subject matter.

Applicant respectfully submits that the rejection does not apply to the claims as presently presented. Withdrawal of the rejection is respectfully requested.

Claim Rejection under 35 U.S.C. § 112(b)

Claims 51–83 are rejected under 35 U.S.C. § 112(b) as allegedly being indefinite.

Claim 51 - Heterologous functional domain

Claim 51 is amended to require that the one or more functional domains are heterologous to the CRISPR-Cas 13b-gRNA complex. According to the Merriam-Webster dictionary, the plain meaning of the term 'heterologous' means "derived from a different species."

Claim 54 - Mutations R116A, H121A, R1177A, and H1182A

According to the Examiner, claim 54 is indefinite, stating:

> Claim 54 was previously further indefinite in that it is drawn to the composition of claim 51, wherein the Cas13b effector protein comprises a mutation in one or more of positions R116A. This is indefinite on the basis that elected SEQ ID NO:32 comprises a "S" at position 116, not a "R". Thus the Cas13b effector protein of SEQ ID NO:32 cannot comprise a mutation in one or more of positions R116A. Further even if the elected SEQ ID NO:32 had a "R" at position 116, such as SEQ ID NO:31, claim 51 does not allow any mutations of the recited Cas13b amino acid sequences 31-38. Thus accordingly, claim 54 does not properly depend from claim 51…

Claim 51 is amended to require:

(a) a Cas13b effector protein comprising any one of amino acid sequences of SEQ ID NO: 31-38, or ***a functional variant thereof, a homologue or an orthologue thereof***… (Emphasis added)

Claim 54, as originally filed, required:

The composition of claim 51, wherein the Cas13b effector protein comprises a mutation in one or more of positions R116A, H121A, R1177A, and H1182A of Cas13b effector protein originating from *Bergeyella zookelcum* ATCC 43767 or amino acid positions corresponding thereto of a Cas13b ortholog.

The Cas13b effector protein originating from *Bergeyella zookelcum* ATCC 43767 corresponds to the amino acid sequence of SEQ ID NO: 65. SEQ ID NO: 32 is the amino acid sequence of a Cas13b ortholog from *Prevotella intermedia.* To identify the positions of the claimed mutations within the amino acid sequence of SEQ ID NO: 32, the amino acid sequence of SEQ ID Nos: 65 was aligned with that of SEQ ID NO: 32 as shown in the Tables below.

				116					121				
SEQ ID NO: 65	R	D	L	R	N	F	Y	T	H	K	E	H	G
R116A				A									
H121A									A				
				128					133				
SEQ ID NO: 32	R	D	L	R	N	H	Y	S	H	Y	K	H	S
R128A				A									
H133A									A				

	1172					1177					1182					
SEQ ID NO: 65	V	L	T	Y	I	R	N	K	F	A	H	N	Q	L	P	K
R1177A						A										
H1182A											A					
	1051					1056					1060					
SEQ ID NO: 32	L	L	T	A	V	R	N	A	F	S	H	N	Q	Y	P	M
R1056A						A										
H1060A											A					

The mutations R116A, H121A, R1177A, and H1182A of SEQ ID NO: 65, therefore, correspond to mutations R128A, H133A, R1056A, and H1060A, respectively, in SEQ ID NO: 32.

Claim 54 is amended accordingly.

Claim Rejection under 35 U.S.C. § 112(d)

Claim 54 stands rejected under 35 U.S.C. § 112(b) as allegedly being of improper dependent form. Applicant respectfully submits that the rejection does not apply to the claim as presently presented. Withdrawal of the rejection is respectfully requested.

CONCLUSION

Applicant submits the foregoing as a complete response to the Office Action. Applicant submits that this Amendment and Response place the application in condition for allowance and respectfully requests such action. If any issues can be resolved with an Examiner's Amendment or a telephone conference, please contact Applicant's representative at 478.292.5119.

No additional fees are believed due for consideration of this paper. However, the Commissioner is hereby authorized to charge any fee deemed necessary for consideration of this paper, including any extension of time fees or additional claim fees, or to credit any overpayment to Deposit Account Number 50-5193, reference number **BROD-2780US-CON**.

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Respectfully submitted,

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Doc code: RCEX
Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (01-22)
Approved for use through 05/31/2024. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	18349707	Filing Date	2023-07-10	Docket Number (if applicable)	BROD-2780US-CON	Art Unit	1652
First Named Inventor	David Benjamin Turitz Cox			Examiner Name	Richard G. Hutson		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

- ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ☐ Other _____

☒ Enclosed

- ☒ Amendment/Reply
- ☐ Information Disclosure Statement (IDS)
- ☐ Affidavit(s)/ Declaration(s)
- ☐ Other _____

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____
(Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

☒ **The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**
The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 505193

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

☐ Applicant Signature

PTO/SB/30EFS (01-22)
Approved for use through 05/31/2024. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Signature of Registered U.S. Patent Practitioner			
Signature	/Christopher D. Southgate/	Date (YYYY-MM-DD)	2025-08-27
Name	Christopher D. Southgate, Ph.D., J.D.	Registration Number	54875

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

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

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The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

UNITED STATES
PATENT AND TRADEMARK OFFICE

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Alexandria, VA 22313 - 1450
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ELECTRONIC PAYMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
18/349,707	**08/27/2025 12:24:05 PM Z ET**	**BROD-2780US-CON**

Title of Invention

NOVEL CAS13B ORTHOLOGUES CRISPR ENZYMES AND SYSTEMS

Application Information

APPLICATION TYPE	Utility - Nonprovisional Application under 35 USC 111(a)	PATENT #	-
CONFIRMATION #	7622	FILED BY	Susan Frattura
PATENT CENTER #	72037758	AUTHORIZED BY	CHRISTOPHER SOUTHGATE
CUSTOMER #	198696	FILING DATE	07/10/2023
CORRESPONDENCE ADDRESS	-	FIRST NAMED INVENTOR	David Benjamin Turitz Cox

Payment Information

PAYMENT METHOD	PAYMENT TRANSACTION ID	PAYMENT AUTHORIZED BY
CARD / 2043	**E20258QC24187308**	**Susan Frattura**

FEE CODE	DESCRIPTION	ITEM PRICE($)	QUANTITY	ITEM TOTAL($)
1801	REQUEST FOR CONTINUED EXAMINATION (RCE) - 1ST REQUEST (SEE 37 CFR 1.114)	1500.00	1	1500.00
			TOTAL AMOUNT:	**$1,500.00**

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.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for 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

National Stage of an International Application under 35 U.S.C. 371

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.

New International Application Filed with the USPTO as a Receiving Office

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.

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ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #	RECEIPT DATE / TIME	ATTORNEY DOCKET #
18/349,707	**08/27/2025 12:24:05 PM Z ET**	**BROD-2780US-CON**

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NOVEL CAS13B ORTHOLOGUES CRISPR ENZYMES AND SYSTEMS

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CONFIRMATION #	7622	FILED BY	Susan Frattura
PATENT CENTER #	72037758	FILING DATE	07/10/2023
CUSTOMER #	198696	FIRST NAMED INVENTOR	David Benjamin Turitz Cox
CORRESPONDENCE ADDRESS	-	AUTHORIZED BY	CHRISTOPHER SOUTHGATE

Documents

TOTAL DOCUMENTS: 4

DOCUMENT		PAGES	DESCRIPTION	SIZE (KB)
2025-08-06_FINAL_DRAFT_BI_10157_Response_FOA_BROD_2780US_CON.pdf		10	-	272 KB
2025-08-06_FINAL_DRAFT_BI_10157_Response_FOA_BROD_2780US_CON-AMSB.pdf	(1-1)	1	Amendment Submitted/Entered with Filing of Continued Prosecution Application (CPA)/Request for Continued Examination(RCE)	105 KB
2025-08-06_FINAL_DRAFT_BI_10157_Response_FOA_BROD_2780US_CON-CLM.pdf	(2-7)	6	Claims	154 KB
2025-08-	(8-10)	3	Applicant Arguments/Remarks	229 KB

06_FINAL_DRAFT_BI_10157_Response_FOA_BROD_2780US_CON-REM.pdf		Made in an Amendment	
RCE_BROD-2780US-CON.pdf	3	Request for Continued Examination (RCE)	97 KB

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DOCUMENT	MESSAGE DIGEST(SHA-512)
2025-08-06_FINAL_DRAFT_BI_10157_Response_FOA_BROD_2780US_CON.pdf	DA40815182A14490BFE9367363C63D13AF90335D7B4B2EDC8DEB58D9F79665BE6AF8EB0C31B1601F6F21D7B12E6F2566521A3B308D664CB5565651FB0F40F1B0
2025-08-06_FINAL_DRAFT_BI_10157_Response_FOA_BROD_2780US_CON-AMSB.pdf	090F50771AFD0FD813FBEF0F947D65BE80481D50B3AEDFFE4AE582C81E2064BB05D513819B73D14ECF05EDBE4534BF531E70363617F835F8E01126C29D0F7D03
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RCE_BROD-2780US-CON.pdf	BBBC64761A01F54AE3CE9A770C969864E33FBE0AD1C8E0771004072913BF32FFDF674884477A1714E8A78CD15760E594E43B59297C01B75B5A050CF058449E14

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for 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

National Stage of an International Application under 35 U.S.C. 371

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.

New International Application Filed with the USPTO as a Receiving Office

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.