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	RECORDATION		Inited States Patent and Trademark Of S-131,325				
CAR		RECORDATION FORM COVER SHEET					
To the Director	of the U.S. Patent and Trademark Office: Plea		ments or the new address(es) below.				
1. Name of conv	veying party(les)	2. Name and address of receiving party(ies)					
Harvard University		Name: United States Department of Energy					
		Internal Address:					
Additional name(s) of	conveying party(ies) attached? Yes 🗸 No						
	veyance/Execution Date(s):	Street Address: 1000 Independence Ave., S.W					
,	September 24, 2013						
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Security Agre		City: Washington					
r1	ch Agreement	State: <u>D.C.</u>					
	Interest Assignment	Country: USA Zip:20585					
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Other		Additional name(s) & add					
 Application or A. Patent Applica 	tion No.(s)	document is being filed B. Patent No.(s)	together with a new application				
		D. Fatent NO.(S)					
Serial No. 13/9	954.351						
Serial No. 13/§	954,351						
Serial No. 13/§							
	Additional numbers at						
5. Name and add		6. Total number of ap	oplications and patents				
5. Name and add	Additional numbers at ress to whom correspondence iment should be mailed:	6. Total number of ag involved: 1					
5. Name and add concerning docu Name:Michael	Additional numbers at ress to whom correspondence iment should be mailed: J. Dobbs	6. Total number of an involved: 1 7. Total fee (37 CFR 1	1.21(h) & 3.41) \$				
5. Name and add concerning docu Name: <u>Michael</u>	Additional numbers at ress to whom correspondence iment should be mailed:	6. Total number of an involved: 1 7. Total fee (37 CFR 1 Authorized to be c	1.21(h) & 3.41) \$ charged by credit card				
5. Name and add concerning docu Name: <u>Michael</u> Internal Address:	Additional numbers at Iress to whom correspondence Iment should be mailed: J. Dobbs U. S. Dept. of Energy, IPLD	6. Total number of an involved: 1 7. Total fee (37 CFR 1 Authorized to be c	1.21(h) & 3.41) \$				
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5. Name and add concerning docu Name: <u>Michael</u> Internal Address: Street Address: <u>9</u>	Additional numbers at Iress to whom correspondence Iment should be mailed: J. Dobbs U. S. Dept. of Energy, IPLD	6. Total number of ap involved:_1 7. Total fee (37 CFR 1 Authorized to be c Authorized to be c Enclosed	1.21(h) & 3.41) \$ charged by credit card charged to deposit account overnment interest not affecting title				
5. Name and add concerning docu Name: <u>Michael</u> Internal Address: Street Address: <u>9</u> City: <u>Argonne</u>	Additional numbers at Iress to whom correspondence Iment should be mailed: J. Dobbs U. S. Dept. of Energy, IPLD 800 S. Cass Ave	6. Total number of ap involved: 1 7. Total fee (37 CFR 1 ☐ Authorized to be o ☐ Authorized to be o ☐ Enclosed ☑ None required (go 8. Payment Informat a. Credit Card Las	1.21(h) & 3.41) \$ charged by credit card charged to deposit account overnment interest not affecting title ion st 4 Numbers				
5. Name and add concerning docu Name: <u>Michael</u> Internal Address: Street Address: <u>9</u> City: <u>Argonne</u> State: <u>IL</u>	Additional numbers at Iress to whom correspondence Iment should be mailed: J. Dobbs U. S. Dept. of Energy, IPLD 800 S. Cass Ave Zip:60439	 6. Total number of ap involved: 1 7. Total fee (37 CFR 1 Authorized to be a Authorized to be a Enclosed ✓ None required (gate in the interval of the in	1.21(h) & 3.41) \$ charged by credit card charged to deposit account overnment interest not affecting title ion st 4 Numbers piration Date				
concerning docu Name: <u>Michael</u> Internal Address: Street Address: <u>9</u> City: <u>Argonne</u> State: <u>11</u> Phone Number: <u>6</u>	Additional numbers at Iress to whom correspondence iment should be mailed: J. Dobbs U. S. Dept. of Energy, IPLD 800 S. Cass Ave Zip:60439 30-252-2164	6. Total number of ap involved: 1 7. Total fee (37 CFR 1 ☐ Authorized to be o ☐ Authorized to be o ☐ Enclosed ☑ None required (go 8. Payment Informat a. Credit Card Las	1.21(h) & 3.41) \$ charged by credit card charged to deposit account overnment interest not affecting title ion st 4 Numbers piration Date				
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5. Name and add concerning docu Name: <u>Michael</u> Internal Address: Street Address: <u>9</u> City: <u>Argonne</u> State: <u>11</u> Phone Number: <u>63(</u>	Additional numbers at Iress to whom correspondence iment should be mailed: J. Dobbs U. S. Dept. of Energy, IPLD 800 S. Cass Ave Zip:60439 30-252-2164 0-252-2779 onfirmatory.License@ch.doe.gov	6. Total number of ap involved: 1 7. Total fee (37 CFR 1 ☐ Authorized to be o ☐ Authorized to be o ☐ Enclosed ✓ None required (go 8. Payment Information a. Credit Card Las Exp b. Deposit Account Authorized User	1.21(h) & 3.41) \$				

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Invention Title: Manipulating Replisome Dynamics to Enhance Lambda Red-Mediated Multiplex

Genome Engineering

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Inventor(s): George M. Church, Marc J. Lajoie, Christopher Gregg, Joshua A. Mosberg

U.S. Filing/issue Date: 7 (30/13

Petent or Application Serial No.: 13/954/351

Grant/Contract Number(s): HG005550, DE-FG02-02ER63445

Foreign Applications filed/intended in (countries):

The invention identified above is a Subject Invention under **35 U.S.C. 200, et seq.**, and the Standard Patent Rights clause at **37 CFR 401.14**, FAR **52.227-11** or FAR **52.227-12** (if applicable) which are included among the terms of the above identified grant or contract award from the United State Government. This document is confirmatory of:

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The Government is hereby granted an irrevocable power to inspect and make copies of the above-identified patent application,

Signe	d this	day of _	Septem	ber	. 20 <u>{ 3</u> .	
Ву	Ryan Duscoll			Dwo	- Puscall	
	^U (Institutional Business Officia	I)		/(s	ignature)	
Title _	Patent Coordinate	***		and the second		
For H	ARVARD UNIVERSITY					
	(Grantee/Contractor Organ	nization)				······································
At <u>13</u>	50 Massachusetts Ave. Camb:	ridge,	MA 02138	US		

(Business Address)

RECORDED: 02/05/2014