504090695 11/10/2016 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4137363

		NEW ASSIGNMENT	
NATURE OF CONVEYANCE:		ASSIGNMENT	
CONVEYING PARTY D	ΑΤΑ		
		Name	Execution Date
FREDERIC J. DE SAUVAGE			07/16/2012
GERRIT J.P. DIJKGRAAF			07/17/2012
THOMAS JANUARIO			07/19/2012
ROBERT L. YAUCH			07/19/2012
RECEIVING PARTY DA			
Name:	GENENTECH, INC.		
Street Address:	1 DNA WAY		
City:	SOUTH SAN FRANCISCO		
State/Country:	CALIFORNIA		
Postal Code:	94080-4990		
PROPERTY NUMBERS Property Type		Number	
Application Number:	15	130223	_
CORRESPONDENCE D	ΑΤΑ		
		17)235-9492	
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ASSIGNMENT

WHEREAS, Frederic J. de Sauvage, Gerrit J.P. Dijkgraaf, Thomas Januario, and Robert L. Yauch (each an "ASSIGNOR"), have invented a new and useful invention in

MUTANT SMOOTHENED AND METHODS OF USING THE SAME

for which an International Application Serial No. PCT/US2010/047739, filed September 2, 2010, has been filed and claims the benefit from United States Provisional Application No. 61/239,364, filed September 2, 2009, and was subsequently submitted to the United States Receiving Office under 35 USC §371 on March 2, 2012 as Application Serial No. 13/394,069 (Docket No. P4367R1) for Letters Patent; and

WHEREAS, GENENTECH, INC., a corporation organized and existing under and by virtue of the laws of the State of Delaware, having a place of business at 1 DNA Way, South San Francisco, California 94080-4990, is desirous of acquiring an interest in and to said invention, and in and to the Letters Patents to be obtained therefor;

NOW, THEREFORE, be it known by all whom it may concern;

That for good and valuable consideration the receipt of which is hereby acknowledged, the undersigned ASSIGNOR(S) have and do hereby sell, assign, transfer and set over unto the said GENENTECH, INC., its successors and assigns, the full and exclusive right, title and interest, including all rights under the Paris Convention for the Protection of Industrial Property, in and to said invention, and in and to any and all applications filed and Letters Patents granted and issued therefor, or any continuation, division, renewal, or substitute thereof, and as to Letters Patents any reissue or reexamination thereof, not only for, to, and in the United States of America, its territories and possessions, but for, to and in all other countries; and it has been and is hereby authorized and requested that the appropriate government agencies issue said Letters Patents to said GENENTECH, INC., in accordance with this Assignment.

The undersigned ASSIGNOR(S) covenant and agree to cooperate with GENENTECH, INC., to enable said GENENTECH, INC. to enjoy to the fullest extent the right, title and interest herein conveyed in the United States and foreign countries. Such cooperation by the undersigned ASSIGNOR(S) includes prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance, all to the extent deemed necessary or desirable by said GENENTECH, INC., (a) for perfecting the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting applications for reissuance of any of said patents; (d) for interference or other priority proceedings involving said invention; and (e) for legal proceedings involving said invention and any applications therefor and any patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by the undersigned ASSIGNOR(S) in providing such cooperation shall be paid for by said GENENTECH, INC.

The terms and covenants of this assignment shall inure to the benefit of said GENENTECH, INC., its successors, assigns and other legal representatives, and shall be binding upon the undersigned ASSIGNOR(S), their respective heirs, legal representatives and assigns.

> PATENT REEL: 040278 FRAME: 0432

The undersigned ASSIGNOR(S) hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF I/we undersign as follows;

7/16/12 Date Frederic J. de Sauvage Mailing address: I DNA Way South San Francisco, CA 94080 Citizenship: Belgium 117/2012 Gerrit J.P. Dijkgraaf Date Mailing address: 1 DNA Way South San Francisco, CA 94080 Citizenship: Netherlands 711912012 man Thomas Januario Date Mailing address: 1 DNA Way South San Francisco, CA 94080 Citizenship: United States of America 7/19/2012 Robert L. Yauch Mailing address: 1 DNA Way South San Francisco, CA 94080 Citizenship: United States of America Page 2 of 2

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RECORDED: 11/10/2016