

<b>PATENT ASSIGNMENT COVER SHEET</b>
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EPAS ID: PAT3272128

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT

**CONVEYING PARTY DATA**

Name	Execution Date
UGUR SAHIN	01/15/2015
OZLEM TURECI	01/19/2015
TORSTEN SEPPMANN	02/26/2015
HOLGER HOFF	01/12/2015
JENS SCHUMACHER	01/12/2015

**RECEIVING PARTY DATA**

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<b>City:</b>	MAINZ
<b>State/Country:</b>	GERMANY
<b>Postal Code:</b>	55131

**PROPERTY NUMBERS Total: 2**

Property Type	Number
<b>Application Number:</b>	13504638
<b>Application Number:</b>	14571425

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**PATENT**

**Address Line 4:** CHICAGO, ILLINOIS 60661

**ATTORNEY DOCKET NUMBER:** 25108US01 & 25108US02

**NAME OF SUBMITTER:** ANGELINE R. BABEL

**SIGNATURE:** /Angeline R. Babel/

**DATE SIGNED:** 03/19/2015

**Total Attachments: 9**

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## PATENT ASSIGNMENT

Attorney Case Number: 25108US01  
25108US02

U.S. Serial Number: 13/504,638  
U.S. Serial Number: 14/571,425

WHEREAS, we, Ugur Sahin, Özlem Türeci, Torsten Seppmann, Holger Hoff, and Jens Schumacher (collectively referred to hereinafter as the "Assignors") have made new and useful inventions and improvements disclosed in a United States patent applications entitled "CLONAL EXPANSION OF B CELLS" filed on April 27, 2012 and December 16, 2014, in the United States Patent and Trademark Office as Serial Nos. 13/504,638 and 14/571,425, respectively; and U.S. Patent Application No. 13/504,639 is a 371 of the international patent application entitled "CLONAL EXPANSION OF B CELLS " filed on October 29, 2010, as International Application No. PCT/EP2010/006633 (collectively referred to hereinafter as the "Applications").

WHEREAS, BioNTech AG, An der Goldgrube 12, Mainz, Germany, 55131; and Universitätsmedizin der Johannes Gutenberg-Universität Mainz, Langenbeckstrasse 1, Mainz, DE 55131 (referred to hereinafter as the "Assignees") are desirous of acquiring the title, rights, and privileges hereinafter recited and whereas the Assignees have entered into a certain cooperation agreement/treaty (the "Cooperation Treaty" entitled "Cooperation, Acquisition and License Agreement" dated December 30, 2008), pursuant to which the details of the relationship between the Assignees are specified.

NOW, THEREFORE, in consideration of the agreements and covenants contained in the Cooperation Treaty and in exchange for other good and valuable consideration in hand paid, the receipt, adequacy, and sufficiency of which are hereby acknowledged, and subject to the terms and conditions of the Cooperation Treaty, the Assignors hereby assign to the Assignees, their successors and assigns, the entire right, title and interest in and to said Applications and the inventions and improvements disclosed therein, and in any and all other (provisional or non-provisional) applications, both United States and foreign, based thereon or that claim priority thereto, including any continuation, continuation-in-part, or divisional application that the Assignors may file, either solely or jointly with others, and in any and all Letters Patent of the United States and foreign countries that may be obtained on any of said Applications, and in any reexamination, renewal, substitution, reissue or extension of such applications or patents, and every priority right that is or may be predicated upon or arise from said inventions, improvements, applications, and Letters Patent.

The Assignors hereby authorize the Assignees, their successors and assigns, to file patent applications in any or all countries for any or all of said inventions and improvements in our name or in the name of the Assignees, their successors and assigns, or otherwise as said Assignees, their successors and assigns, may deem advisable, under the International Convention or otherwise. The Assignors hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said Assignees, their successors and assigns.

The Assignors warrant to be the owner of the entire right, title and interest in said

invention or improvements and to have the right to make this Assignment, and further warrant that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

The Assignors hereby agree, upon the request and at the expense of said Assignees, their successors and assigns, to execute any and all continuation, continuation-in-part, divisional, extension, renewal, and substitute applications for said invention or improvements, and any necessary oath, affidavit or declaration relating thereto, and any application for the reissue, reexamination, or extension of any Letters Patent that may be granted upon said Applications, that said Assignees, their successors or assigns may deem necessary or expedient; and to cooperate to the best of the ability of the Assignors with said Assignees, their successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all acts necessary to obtain said Letters Patent in the United States and foreign countries, and vest all rights therein hereby conveyed in the Assignees, their successors and assigns, whereby said Letters Patent will be held and enjoyed by the said Assignees, their successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the Assignors if this Assignment had not been made.

Nothing in this Assignment, express or implied, is intended or shall be construed to modify, expand, or limit in any way the terms of the Cooperation Treaty. The terms of this Assignment shall be subject to the terms of the Cooperation Treaty. In the event of any conflict or inconsistency between the terms of the Cooperation Treaty and the terms hereof, the terms of the Cooperation Treaty shall supersede and govern.

Subject to the terms of the Cooperation Treaty, the Assignees each hereby mutually covenant and agree to reasonably cooperate to enable each to enjoy to the fullest extent permitted under the Cooperation Treaty, the right, title and interest in and to said inventions or improvements. Such reasonable cooperation shall include execution of any and all continuation, continuation-in-part, divisional, extension, renewal, and substitute applications for said invention or improvements, and any necessary oath, affidavit or declaration relating thereto, and any application for the reissue, reexamination or extension of any Letters Patent that may be granted upon said application, and any and all applications and other document for Letters Patent in foreign countries on said invention or improvements. The Assignees further hereby mutually covenant and agree to cooperate in any proceedings or transactions involving such applications or patents (including and as defined by the Cooperation Agreement), including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed jointly in the Assignor and the Assignee, each of their successors and assigns. In the event of any conflict or inconsistency between the terms of the Cooperation Treaty and the terms of this Assignment, the terms of the Cooperation Treaty shall supersede and govern.

This Assignment shall be binding upon and shall inure to the benefit of the Assignee and Assignors and their respective successors and assigns.


This Assignment may be executed in one or more counterparts, all of which shall be considered one and the same Assignment. The signatures from each counterpart may be combined with a copy of the Assignment to constitute the entire Assignment.

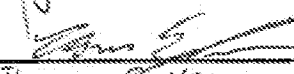
[SIGNATURE PAGE FOLLOWS]

EXECUTED this \_\_\_\_\_ day of 15<sup>th</sup> Jan, 2014<sup>5</sup>



\_\_\_\_\_  
Ugur Sahin,

WITNESSED by  this \_\_\_\_\_ day of 15<sup>th</sup>, 2014<sup>5</sup>

WITNESSED by  this 15<sup>th</sup> day of January, 2014<sup>5</sup>  
*Thomas Engel*

EXECUTED this 19 day of July, 2015

[Signature]  
Özlem Türeci,


WITNESSED by [Signature] this 19 day of July, 2015

WITNESSED by Anthe - C. Weber this 19<sup>th</sup> day of January, 2015

EXECUTED this 26 day of February, <sup>2015</sup>2014.

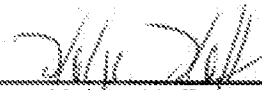
  
\_\_\_\_\_  
Torsten Seppmann

WITNESSED by  Wolfgang Bäcker this 26<sup>th</sup> day of February, 2014.

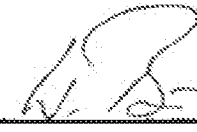
WITNESSED by  Michael Howe this 26<sup>th</sup> day of February, 2014.



EXECUTED this 12<sup>th</sup> day of JANUARY, 2015



\_\_\_\_\_  
Holger Hoff

WITNESSED by  this 12<sup>th</sup> day of JANUARY, 2015

WITNESSED by  this 12<sup>th</sup> day of JANUARY, 2015

EXECUTED this 12. day of January, 201~~4~~<sup>5</sup>.

Jens Schumacher  
Jens Schumacher

WITNESSED by Wolfgang Bäcker this 12<sup>th</sup> day of January, 201~~4~~<sup>5</sup>.

WITNESSED by Thomas Eysel this 12<sup>th</sup> day of January, 201~~4~~<sup>5</sup>.

ASSIGNEE: [Signature]  
Universitätsmedizin der Johannes Gutenberg-

Universität Mainz

Wissenschaftlicher Vorstand  
der Universitätsmedizin  
Johannes Gutenberg-Universität Mainz  
Obere Zahlbacher Straße 63

By: \_\_\_\_\_  
Name: Stefan Mainz  
Title:

WITNESSED by [Signature] this 27 day of Jan., 2015

WITNESSED by M. Sadrooni this 27 day of Jan., 2015

Acknowledged and agreed:

ASSIGNEE:  
BioNTech AG

By: [Signature]  
Name: Sime Bekku  
Title: CEO, Managing Director

WITNESSED by [Signature] this 11<sup>th</sup> day of Feb., 2015

WITNESSED by [Signature] this 11<sup>th</sup> day of Feb., 2015