

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT6167241

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	XCELL BIOSCIENCES, INC.	05/20/2020
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	HBM GENOMICS LTD., AS ADMINISTRATIVE AGENT	
<b>Street Address:</b>	GOVERNORS SQUARE, SUITE #4-212-2	
<b>Internal Address:</b>	23 LIME TREE BAY AVENUE, WEST BAY	
<b>City:</b>	GRAND CAYMAN	
<b>State/Country:</b>	CAYMAN ISLANDS	
<b>PROPERTY NUMBERS Total: 6</b>		
<b>Property Type</b>	<b>Number</b>	
<b>Application Number:</b>	14163456	
<b>Application Number:</b>	15566337	
<b>Application Number:</b>	15789464	
<b>Application Number:</b>	15629240	
<b>Application Number:</b>	62840782	
<b>Application Number:</b>	62976690	
<b>CORRESPONDENCE DATA</b>		
<b>Fax Number:</b>	(214)981-3400	
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>		
<b>Phone:</b>	214-981-3483	
<b>Email:</b>	dclark@sidley.com	
<b>Correspondent Name:</b>	DUSAN CLARK, ESQ.	
<b>Address Line 1:</b>	SIDLEY AUSTIN LLP	
<b>Address Line 2:</b>	2021 MCKINNEY AVE., SUITE 2000	
<b>Address Line 4:</b>	DALLAS, TEXAS 75201	
<b>ATTORNEY DOCKET NUMBER:</b>	96653-10020	
<b>NAME OF SUBMITTER:</b>	DUSAN CLARK	
<b>SIGNATURE:</b>	/Dusan Clark/	
<b>DATE SIGNED:</b>	06/23/2020	

**Total Attachments: 10**

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## INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement ("Agreement") is entered into as of May 20, 2020 by and between HBM GENOMICS LTD., as administrative agent under the Notes (as defined below) (the "Administrative Agent"), for the benefit of the Holders (as defined below), and XCELL BIOSCIENCES, INC. ("Grantor").

### RECITALS

A. Reference is made to (i) the Secured Convertible Note Purchase Agreement, dated on or around May 20, 2020, by and among the Grantor and the persons and entities named on the Schedule of Purchasers attached thereto as Exhibit A (each such person or entity, together with their respective successors and assigns, individually, a "Holder" and collectively, the "Holders") (as amended, modified or supplemented from time to time, the "Note Purchase Agreement") and (ii) each Secured Convertible Promissory Note by and between each Holder and Grantor issued in accordance with the Note Purchase Agreement (in each case, as the same may be amended, modified or supplemented from time to time, each individually, a "Note" and collectively, the "Notes"); capitalized terms used but not defined herein are used as defined in the Notes.

B. The Holders have agreed to make certain advances of money and to extend certain financial accommodation to Grantor (the "Loans") in the amounts and manner set forth in the Note Purchase Agreement and the Notes. The Holders are willing to make the Loans to Grantor, but only upon the condition, among others, that Grantor shall grant to the Administrative Agent, for the benefit of the Holders, a security interest in certain Copyrights, Trademarks, Patents, and Mask Works (as each term is described below) to secure the obligations of Grantor under the Note Purchase Agreement and the Notes.

C. Pursuant to the terms of the Notes, Grantor has granted to the Administrative Agent, for the benefit of the Holders, a security interest in all of Grantor's right, title and interest, whether presently existing or hereafter acquired, in, to and under all of the Collateral.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, as collateral security for the prompt and complete payment when due of its obligations under the Note Purchase Agreement and the Notes, Grantor hereby represents, warrants, covenants and agrees as follows:

### AGREEMENT

1. Grant of Security Interest. Subject to Section 10 of the Notes, to secure its obligations under the Note Purchase Agreement and the Notes, Grantor grants and pledges to the Administrative Agent, for the benefit of the Holders, a security interest in all of Grantor's right, title and interest in, to and under its intellectual property (all of which shall collectively be called the "Intellectual Property Collateral"), including, without limitation, the following:

(a) Any and all copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing,

created, acquired or held, including without limitation those set forth on Exhibit A attached hereto (collectively, the "Copyrights");

(b) Any and all trade secrets, and any and all intellectual property rights in computer software and computer software products now or hereafter existing, created, acquired or held;

(c) Any and all design rights that may be available to Grantor now or hereafter existing, created, acquired or held;

(d) All patents, patent applications and like protections including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same, including without limitation the patents and patent applications set forth on Exhibit B attached hereto (collectively, the "Patents");

(e) Any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Grantor connected with and symbolized by such trademarks, including without limitation those set forth on Exhibit C attached hereto (collectively, the "Trademarks");

(f) All mask works or similar rights available for the protection of semiconductor chips, now owned or hereafter acquired, including, without limitation those set forth on Exhibit D attached hereto (collectively, the "Mask Works");

(g) Any and all claims for damages by way of past, present and future infringements of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights identified above;

(h) All licenses or other rights to use any of the Copyrights, Patents, Trademarks, or Mask Works and all license fees and royalties arising from such use to the extent permitted by such license or rights;

(i) All amendments, extensions, renewals and extensions of any of the Copyrights, Trademarks, Patents, or Mask Works; and

(j) All proceeds and products of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

2. Recordation. Grantor authorizes the Commissioner for Patents, the Commissioner for Trademarks and the Register of Copyrights and any other government officials to record and register this Agreement upon request by the Administrative Agent.

Grantor hereby authorizes the Administrative Agent to (a) modify this Agreement unilaterally by amending the exhibits to this Agreement to include any Intellectual Property Collateral which Grantor obtains subsequent to the date of this Agreement and (b) file a duplicate original of this Agreement containing amended exhibits reflecting such new Intellectual Property Collateral.

3. Loan Documents. This Agreement has been entered into pursuant to and in conjunction with the Note Purchase Agreement and the Notes, which is hereby incorporated by reference. The provisions of the Note Purchase Agreement and the Notes, as applicable, shall supersede and control over any conflicting or inconsistent provision herein. The rights and remedies of the Administrative Agent with respect to the Intellectual Property Collateral are as provided by the Note Purchase Agreement and the Notes and related documents, and nothing in this Agreement shall be deemed to limit such rights and remedies.

4. Execution in Counterparts. This Agreement may be executed in counterparts (and by different parties hereto in different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. Delivery of an executed counterpart of a signature page to this Agreement by facsimile or in electronic (including, "pdf" or "tif" format) shall be effective as delivery of a manually executed counterpart of this Agreement.

5. Electronic Execution of Documents. Each party hereto may execute this Agreement by electronic means and recognizes and accepts the use of electronic signatures and records by any other party hereto in connection with the execution and storage hereof.

6. Successors and Assigns. This Agreement will be binding on and shall inure to the benefit of the parties hereto and their respective successors and assigns.

7. Governing Law. This Agreement and any claim, controversy, dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this Agreement and the transactions contemplated hereby and thereby shall be governed by, and construed in accordance with, the laws of the United States and the State of Delaware, without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction).

[Signature page follows.]

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

**GRANTOR:**

**XCELL BIOSCIENCES, INC.**

By: \_\_\_\_\_

Name: Brian S. Feth

Title: Chief Executive Officer

**ADMINISTRATIVE AGENT:**

**HBM GENOMICS LTD.**

By: \_\_\_\_\_

Name: Saeid Akhtari

Title: Managing Director

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

**GRANTOR:**

**XCELL BIOSCIENCES, INC.**

By: \_\_\_\_\_  
Name: Brian S. Feth  
Title: Chief Executive Officer

**ADMINISTRATIVE AGENT:**

**HBM GENOMICS LTD.**

By:  \_\_\_\_\_  
Name: Saeid Akhtari  
Title: Managing Director

EXHIBIT A

Copyrights

None



**EXHIBIT B**

**Patents**

<b>Document No.</b>	<b>File Date</b>	<b>Title</b>	<b>App Serial No.</b>	<b>Application Pub. No.</b>	<b>Publish or Grant Date</b>
US20140212895A1	2014-01-24	Cancer analysis system	14/163456		2014-07-31
US9857360B2	2014-01-24	Cancer analysis system (granted).	14/163456	US2014/0212895 A1	2018-01-02
WO/2014/117021A2	2014-01-24	Methods, compositions, kits, and systems for selective enrichment of target cells	US2014/013048		2014-07-31
WO/2014/117021A3	2014-01-24	Methods, compositions, kits, and systems for selective enrichment of target cells	US2014/013048		2014-10-09
AU2014209218A1	2014-01-24	Methods, compositions, kits, and systems for selective enrichment of target cells	AU2014209218A		2015-07-02
AU2014209218B2	2014-01-24	Methods, compositions, kits, and systems for selective enrichment of target cells	AU2014209218A	AU2014209218 A1	2018-06-07
CA2895791A1	2014-01-24	Methods, compositions, kits, and systems for selective enrichment of target cells	CA2895791A		2014-07-31
CN104956226A	2014-01-24	Methods, compositions, kits, and systems for selective enrichment of target cells	CN201480006151A		2015-09-30
CN104956226B	2014-01-24	Methods, compositions, kits and systems for the selective enrichment of target cells	CN201480006151A	CN104956226 A	2018-02-02
CN108165603A	2014-01-24	Methods, compositions, kits, and systems for selective enrichment of target cells	CN201711433018A		2018-06-15
EP2948776A2	2014-01-24	Methods, compositions, kits, and systems for selective enrichment of target cells	EP20140743533		2015-12-02
EP2948776A4	2014-01-24	Methods, compositions, kits, and systems for selective enrichment of target cells	EP14743533A		2016-08-24
EP2948776B1	2014-01-24	Methods, compositions, kits, and systems for selective enrichment of target cells	EP20140743533	EP2948776 A2; EP2948776 A4	2019-12-04
EP2948776B8	2014-01-24	Methods, compositions, kits, and systems for selective enrichment of target cells	EP20140743533	EP2948776 A2; EP2948776 A4	2020-02-26
GB2516196A	2014-01-24	Methods, compositions, kits, and systems for selective enrichment of target cells	GB201419892A		2015-01-14
GB2516196A8	2014-01-24	Methods, compositions, kits, and systems for selective enrichment of target cells	GB201419892A		2015-02-18
GB2516196B	2014-01-24	Methods, compositions, kits, and systems for selective enrichment of target cells	GB201419892A	GB2516196 A; GB2516196 A8	2015-09-09

Document No.	File Date	Title	App Serial No.	Application Pub. No.	Publish or Grant Date
US20180100134A1	2016-04-15	Cancer cell enrichment system	15/566337		2018-04-12
EP3283611A4	2016-04-15	Cancer cell enrichment system	EP20160780896		2018-12-26
EP3283611A1	2016-04-15	Cancer cell enrichment system	EP20160780896		2018-02-21
WO/2016/168687A1	2016-04-15	Cancer cell enrichment system	US2016/027881		2016-10-20
CA2982365A1	2016-04-15	Cancer cell enrichment system	CA2982365A		2016-10-20
CN107636139A	2016-04-15	Cancer cell enrichment system	CN201680034298A		2018-01-26
GB2555728A	2016-04-15	Cancer cell enrichment system	GB201718457A		2018-05-09
AU2016249278A1	2016-04-15	Cancer cell enrichment system	AU2016249278A		2017-11-02
US20180066223A1	2017-10-20	Cancer cell enrichment system			2018-03-08
US20170369904A1	2017-06-21	Methods for increasing cell culture transfection efficiency and cellular reprogramming	15/789464		2017-12-28
WO/2017/223199A1	2017-06-21	Methods for increasing cell culture transfection efficiency and cellular reprogramming	US2017/038542		2017-12-28
WO/2019/126146A1	2018-12-18	Methods of modulating cell phenotype by way of regulating the gaseous environment	US2018/066197		2019-06-27
WO/2019/152920A1	2019-02-04	Multiple incubator cell culture system with atmospheric regulation operated by an integrated control system	US2019/016505		2019-08-08
62/840,782	2019-04-30	Modulating a cell phenotype in vitro by regulating the atmospheric environment to make the phenotype suitable for therapeutic use (US Provisional)			
Regular application, to be filed ...	2020-04-29	Modulating a cell phenotype in vitro by regulating the atmospheric environment to make the phenotype suitable for therapeutic use			
62/976,690	2020-02-14	Gas and liquid flow regulation system for cell culture. (US Provisional)			
Regular application, to be filed ...	2021-02-13	Gas and liquid flow regulation system for cell culture.			

## EXHIBIT C

### Trademarks

<u>Description</u>	Registration/ Application <u>Number</u>	Registration/ Application <u>Date</u>
Xcell Biosciences*	N/A	N/A
Xcellbio*	N/A	N/A
Xcell Bio*	N/A	N/A
AVATAR*	N/A	N/A
AVATAR Cell Control System*	N/A	N/A
KALI Cell Foundry*	N/A	N/A
AVATAR AI*	N/A	N/A

EXHIBIT D

Mask Works

None