

## TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

ETAS ID: TM685609

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT		
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST		
<b>CONVEYING PARTY DATA</b>			
<b>Name</b>	<b>Formerly</b>	<b>Execution Date</b>	<b>Entity Type</b>
NGD SYSTEMS, INC.		11/02/2021	Corporation: DELAWARE
<b>RECEIVING PARTY DATA</b>			
<b>Name:</b>	SILICON VALLEY BANK		
<b>Street Address:</b>	3003 TASMAN DRIVE		
<b>City:</b>	SANTA CALRA		
<b>State/Country:</b>	CALIFORNIA		
<b>Postal Code:</b>	95054		
<b>Entity Type:</b>	Corporation: CALIFORNIA		
<b>PROPERTY NUMBERS Total: 2</b>			
<b>Property Type</b>	<b>Number</b>	<b>Word Mark</b>	
<b>Registration Number:</b>	5376215	NGD SYSTEMS	
<b>Registration Number:</b>	5376214	NGD SYSTEMS	
<b>CORRESPONDENCE DATA</b>			
<b>Fax Number:</b>	4048853900		
<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>	4048853868		
<b>Email:</b>	rusty.close@troutman.com		
<b>Correspondent Name:</b>	CHRISTOPHER CLOSE		
<b>Address Line 1:</b>	TROUTMAN PEPPER LLP		
<b>Address Line 2:</b>	600 PEACHTREE STREET NE, SUITE 3000		
<b>Address Line 4:</b>	ATLANTA, GEORGIA 30308-2216		
<b>ATTORNEY DOCKET NUMBER:</b>	220763.002429		
<b>NAME OF SUBMITTER:</b>	Christopher C Close, Jr.		
<b>SIGNATURE:</b>	/Christopher C. Close Jr./		
<b>DATE SIGNED:</b>	11/03/2021		
<b>Total Attachments: 13</b>			
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## INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement (“**Agreement**”) is entered into as of November 2, 2021 by and between SILICON VALLEY BANK, a California corporation (“**Bank**”), and NGD SYSTEMS, INC., a Delaware corporation (“**Grantor**”).

### RECITALS

A. Bank has 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 that certain Loan and Security Agreement by and between Bank and Grantor dated as of December 6, 2017 (as the same may be amended, modified or supplemented from time to time, the “**Loan Agreement**”; capitalized terms used herein are used as defined in the Loan Agreement). Bank is willing to make the Loans to Grantor, but only upon the condition, among others, that Grantor shall grant to Bank 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 Loan Agreement.

B. Pursuant to the terms of that certain Sixth Amendment to Loan and Security Agreement dated as of even date herewith, by and between Bank and Grantor (the “**Sixth Amendment**”), Grantor has agreed to amend the Loan Agreement and grant to Bank 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. Bank is willing to enter into the Sixth Amendment, but only upon the condition, among others, that Grantor shall grant to Bank a security interest in Copyrights, Trademarks, Patents, and Mask Works (as each term is described below) to secure the obligations of Grantor under the Loan Agreement.

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 Loan Agreement, Grantor hereby represents, warrants, covenants and agrees as follows:

### AGREEMENT

1. Grant of Security Interest. To secure its obligations under the Loan Agreement, Grantor grants and pledges to Bank 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 or 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 and any patents and patent applications claiming the priority benefit of 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. Termination. This Agreement will terminate and Bank’s security interest in Intellectual Property Collateral hereunder shall be extinguish upon occurrence of the Release Milestone (as such term is defined in the Sixth Amendment). Upon such termination, Bank shall forthwith execute any and all such instruments necessary to terminate the security interest hereunder and release the Intellectual Property as Collateral under this Agreement and the Amendment.

3. 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 Bank.

4. Authorization. Grantor hereby authorizes Bank 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.

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

6. 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 (i.e., "pdf" or "tif" format) shall be effective as delivery of a manually executed counterpart of this Agreement.

7. 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.

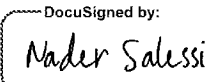
8. Governing Law. This Agreement and any claim, controversy, dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this Agreement and the transactions contemplated hereby and thereby shall be governed by, and construed in accordance with, the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

NGD SYSTEMS, INC.

By:   
B6DCACEPDF7D437...  
Nader Salessi  
CEO

**BANK:**

SILICON VALLEY BANK

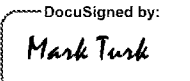
By:   
0C0575F9677949C...  
Mark Turk  
Managing Director

EXHIBIT A

Copyrights

No.	Description	Registration Number	Application Number
1.	None Identified		

EXHIBIT B

## Patents

No.	Description	Application Number	Registration Number
1.	System and Method for Executing Native Client Code in a Storage Device		10,168,997 (01/01/2019)
2.	Interface Compatible with M.2 Connector Socket for Ultra High Capacity Solid State Drive		10,223,316 (03/05/2019)
3.	System and Method for Executing Map-Reduce Tasks in a Storage Device		8,819,335 (08/26/2014)
4.	System and Method for Efficient Flash Translation Layer		8,838,936 (09/16/2014)
5.	Power Efficient Method for Cold Storage Data Retention Management		8,843,700 (09/23/2014)
6.	System and Method for Performing Efficient Processing of Data Stored in a Storage Node		9,021,189 (04/28/2015)
7.	System and Method for Performing Efficient Searches and Queries in a Storage Node		9,092,321 (07/28/2015)



No.	Description	Application Number	Registration Number
8.	Programmable Data Write Management System and Method for Operating the Same in a Solid State Drive		9,092,362 (07/28/2015)
9.	Power Efficient Method for Cold Storage Data Retention Management		9,250,820 (02/02/2016)
10.	Dynamic Self-Correcting Power Management for Solid State Drive		9,323,304 (04/26/2016)
11.	System and Method for Efficient Flash Translation Layer		9,348,760 (05/24/2016)
12.	Programmable Data Read Management System and Method for Operating the Same in a Solid State Drive		9,354,822 (05/31/2016)
13.	Configurable Read-Modify-Write Engine and Method for Operating the Same in a Solid State Drive		9,448,745 (09/20/2016)
14.	System and Method for Management of Garbage Collection Operation in a Solid State Drive		9,454,551 (09/27/2016)
15.	System and Method for Supporting Atomic Writes in a Flash Translation Layer		9,772,781 (09/26/2017)

No.	Description	Application Number	Registration Number
16.	System and Method for Consistent Performance in a Storage Device		9,983,831 (05/29/2018)
17.	Ultra High Capacity SSD	14/741,921 (06/17/2015)	
18.	Method of Channel Content Rebuild via Raid in Ultra High Capacity SSD	14/741,929 (06/17/2015)	
19.	System and Method to Concurrently Match any Type, Combination and/or Range of Characters Defined by a Regular Expression on a Hardware Implementation Using a Single Detection Logic	14/816,964 (08/03/2015)	
20.	Power Efficient Method and System for Executing Host Data Processing Tasks During Data Retention Operations in a Storage Device	14/816,981 (08/03/2015)	
21.	System and Method for Adaptive Multiple Read of NAND Flash	16/573,962 (09/17/2019)	
22.	System and Method for Computational Storage Device Intercommunication	17/093,403 (11/09/2020)	
23.	Heterogeneous In-Storage Computation	16/897,196 (06/09/2020)	

No.	Description	Application Number	Registration Number
24.	SSD Content Encryption and Authentication		11,080,409 (08/03/2021)
25.	System and Method for Computational Storage Device Intercommunication		10,915,381 (02/09/2021)
26.	System and Method for Outward Communication in a Computational Storage Device		10,929,206 (02/23/2021)
27.	System and Method for Communicating Between Computational Storage Devices	16/653,431 (10/15/2019)	
28.	SSD for Long Term Data Retention		10,795,765 (10/06/2020)
29.	System and Method for Executing Native Client Code in a Storage Device		10,691,417 (06/23/2020)
30.	Interface Compatible with M.2 Connector Socket for Ultra High Capacity Solid State Drive		10,402,359 (09/03/2019)
31.	System and Methods for In-Storage On-Demand Data Decompression		10,445,012 (10/15/2019)

No.	Description	Application Number	Registration Number
32.	System and Method for Consistent Performance in a Storage Device		10,268,420 (04/23/2019)
33.	System and Method for Executing Data Processing Tasks Using Resilient Distributed Datasets (RDDS) in a Storage Device		10,176,092 (01/08/2019)
34.	Power Efficient Method and System for Executing Host Data Processing Tasks During Data Retention Operations in a Storage Device		10,338,832 (07/02/2019)
35.	System and Method for Adaptive Multiple Read of NAND Flash		10,417,087 (09/17/2019)
36.	System and Method for Multi-Stream Data Write		10,198,215 (02/05/2019)
37.	System and Methods for In-Storage In-Demand Data Decompression		9,965,210 (05/08/2018)
38.	Flash Channel Calibration with Multiple Lookup Tables		10,216,572 (02/26/2019)
39.	System and Method for Supporting Atomic Writes in a Flash Translation Layer		10,101,930 (10/16/2018)

No.	Description	Application Number	Registration Number
40.	Power Efficient Method and System for Executing Host Data Processing Tasks During Data Retention Operations in a Storage Device		9,753,661 (09/05/2017)
41.	System and Method for Matching a Regular Expression or Combination of Characters		9,602,130 (03/21/2017)

EXHIBIT C

Trademarks

No.	Description	Serial Number	Registration Number
1.	NGD SYSTEMS (& designs)		5,376,215 (01/09/2018)
2.	NGD SYSTEMS		5,376,214 (01/09/2018)

EXHIBIT D

Mask Works

No.	Description	Application	Registration
1.	None Identified		