

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

Assignment ID: PATI745031

<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>
	Avesha, Inc.	12/13/2024
<b>RECEIVING PARTY DATA</b>		
<b>Company Name:</b>	Eastward Fund Management, LLC	
<b>Street Address:</b>	432 Cherry St.	
<b>City:</b>	West Newton	
<b>State/Country:</b>	MASSACHUSETTS	
<b>Postal Code:</b>	02465	
<b>PROPERTY NUMBERS Total: 9</b>		
<b>Property Type</b>	<b>Number</b>	
<b>Application Number:</b>	17735339	
<b>Application Number:</b>	18597277	
<b>Application Number:</b>	18813554	
<b>Application Number:</b>	63670262	
<b>Patent Number:</b>	11757982	
<b>Patent Number:</b>	12081617	
<b>Patent Number:</b>	11736559	
<b>Patent Number:</b>	12126675	
<b>Patent Number:</b>	11805073	
<b>CORRESPONDENCE DATA</b>		
<b>Fax Number:</b>	2028427899	
<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>	2027762046	
<b>Email:</b>	jmfitzpatrick@cooley.com	
<b>Correspondent Name:</b>	JENNIFER FITZPATRICK	
<b>Address Line 1:</b>	C/O COOLEY LLP	
<b>Address Line 2:</b>	1299 PENNSYLVANIA AVENUE, NW, STE 700	
<b>Address Line 4:</b>	WASHINGTON, DISTRICT OF COLUMBIA 20004	
<b>ATTORNEY DOCKET NUMBER:</b>	318251-102	
<b>NAME OF SUBMITTER:</b>	JENNIFER FITZPATRICK	

PATENT

<b>SIGNATURE:</b>	JENNIFER FITZPATRICK
<b>DATE SIGNED:</b>	01/09/2025
<b>Total Attachments: 9</b> source=Avesha - Intellectual Property Security Agr#page1.tiff source=Avesha - Intellectual Property Security Agr#page2.tiff source=Avesha - Intellectual Property Security Agr#page3.tiff source=Avesha - Intellectual Property Security Agr#page4.tiff source=Avesha - Intellectual Property Security Agr#page5.tiff source=Avesha - Intellectual Property Security Agr#page6.tiff source=Avesha - Intellectual Property Security Agr#page7.tiff source=Avesha - Intellectual Property Security Agr#page8.tiff source=Avesha - Intellectual Property Security Agr#page9.tiff	

## INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement (“Agreement”) dated as of December 13, 2024 by and between Eastward Fund Management, LLC, a Delaware limited liability company with an address at 432 Cherry St., West Newton, MA 02465 (“Lender”) and Avesha, Inc., a Delaware corporation with an address at 285 Billerica Road, Suite 107, Chelmsford, MA 01824 (“Grantor”).

### RECITALS

A. Lender 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 Lender and Grantor dated the Effective Date (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). Lender is willing to make the Loans to Grantor, but only upon the condition, among others, that Grantor shall grant to Lender 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 the Loan Agreement, Grantor has granted to Lender 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 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 Lender 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, 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 Lender.

3. Authorization. Grantor hereby authorizes Lender to 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 file a duplicate original of this Agreement containing amended exhibits reflecting such new Intellectual Property Collateral.

4. Loan Documents. This Agreement has been entered into pursuant to and in conjunction with the Loan Agreement, which is 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 Lender 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.

5. 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.

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 Commonwealth of Massachusetts, without giving effect to any choice or conflict of law provision or rule (whether of the Commonwealth of Massachusetts 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:

**AVESHA, INC.**

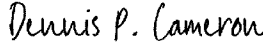
DocuSigned by:  
  
AAAB4FF498CA1B2...

By: Raj Nair

Title: Chief Executive Officer

LENDER:

**EASTWARD FUND MANAGEMENT, LLC**

DocuSigned by:  
  
D6CA308B965D4A9...

By: Dennis Cameron

Title: Chief Executive Officer

EXHIBIT A

Copyrights

<u>Description</u>	Registration/ Application <u>Number</u>	Registration/ Application <u>Date</u>
NONE		

EXHIBIT B

Patents

<u>Description</u>	Registration/ Application <u>Number</u>	Registration/ Application <u>Date</u>
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Attached as Exhibit B - Supplement



AVESHA, INC.

EXHIBIT B -  
SUPPLEMENT

Patent Number	Issue Date	Application No.	Publication No.	Filing Date	Country	Title
11757982	12-Sep-2023	17393960	US-2022-0046083	04-Aug-2021	US	PERFORMING LOAD BALANCING SELF ADJUSTMENT WITHIN AN APPLICATION ENVIRONMENT
12081617	03-Sep-2024	17394102	US-2022-046292	04-Aug-2021	US	NETWORKED SYSTEM FOR REAL-TIME COMPUTER-AIDED AUGMENTATION OF LIVE INPUT VIDEO STREAM
11736559	22-Aug-2023	17394785	US-2022-0046084	05-Aug-2021	US	PROVIDING A SET OF APPLICATION SLICES WITHIN AN APPLICATION ENVIRONMENT
12126675	22-Oct-2024	18223266	US-2023-0362236	18-Jul-2023	US	DISTRIBUTED COMPUTING SYSTEM EMPLOYING APPLICATION SLICE OVERLAY NETWORKS
		17735339	US-2022-0350675	03-May-2022	US	DISTRIBUTED COMPUTING SYSTEM WITH MULTI TENANCY BASED ON APPLICATION SLICES
11805073	31-Oct-2023	17735434	US-2022-0353201	03-May-2022	US	CONTROLLING PLACEMENT OF WORKLOADS OF AN APPLICATION WITHIN AN APPLICATION ENVIRONMENT
		18597277		06-Mar-2024	US	DISTRIBUTED SERVICE DELIVERY SYSTEM WITH ADAPTIVE AUTOSCALING OF COMPUTE RESOURCES
		18813554		23-Aug-2024	US	SERVICE NETWORK EMPLOYING REINFORCEMENT LEARNING BASED GLOBAL LOAD BALANCING
		63670262		12-Jul-2024	US	EFFECTIVE RESOURCE MANAGEMENT OF GPUS ACROSS KUBERNETES CLUSTERS

EXHIBIT C

Trademarks

<u>Description</u>	<u>Registration/ Application Number</u>	<u>Registration/ Application Date</u>
1. Avesha Enterprise for Kubeslice – Non-Registered		
2. Kube Burst - Non-Registered		
3. KubeTally - Non-Registered		
4. KubeAccess – Non-Registered		
5. Smart Scaler – Non-Registered		
6. Smart Event Scaler – Non-Registered		
7. Smart Karpenter – Non-Registered		
8. Elastic GPU Service (EGS) – Non-Registered		

EXHIBIT D

Mask Works

<u>Description</u>	<u>Registration/ Application Number</u>	<u>Registration/ Application Date</u>
NONE		