

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

Assignment ID: PATI601225

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Perceive Corporation	10/02/2024
RECEIVING PARTY DATA	
Company Name:	Amazon.com Services LLC
Street Address:	410 Terry Avenue North
City:	Seattle
State/Country:	WASHINGTON
Postal Code:	98109
PROPERTY NUMBERS Total: 198	
Property Type	Number
Application Number:	62199560
Application Number:	15224632
Application Number:	16812361
Application Number:	17828020
Application Number:	62295110
Application Number:	15231789
Application Number:	17187638
Application Number:	18407173
Application Number:	62365253
Application Number:	15671105
Application Number:	62427739
Application Number:	15825030
Application Number:	17962789
Application Number:	18787715
Application Number:	62431478
Application Number:	15836694
Application Number:	62492940
Application Number:	15815222
Application Number:	15815251
Application Number:	17894798

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Property Type	Number
Application Number:	62599013
Application Number:	15901456
Application Number:	15901459
Application Number:	16852329
Application Number:	17514701
Application Number:	62611923
Application Number:	15869990
Application Number:	15870020
Application Number:	15870046
Application Number:	15870070
Application Number:	16591591
Application Number:	18737459
Application Number:	15921633
Application Number:	15921630
Application Number:	62660914
Application Number:	62724589
Application Number:	16120386
Application Number:	16120387
Application Number:	16924360
Application Number:	17316639
Application Number:	18384529
Application Number:	62627407
Application Number:	15921622
Application Number:	17982488
Application Number:	15231787
Application Number:	15396267
Application Number:	15836676
Application Number:	15815235
Application Number:	15921634
Application Number:	62654529
Application Number:	16376637
Application Number:	17671557
Application Number:	18241885
Application Number:	62720647
Application Number:	62756037
Application Number:	16246112
Application Number:	16246130
Application Number:	16246142

Property Type	Number
Application Number:	16246150
Application Number:	16246182
Application Number:	16246191
Application Number:	17665567
Application Number:	62742802
Application Number:	62773162
Application Number:	16212617
Application Number:	16212618
Application Number:	16212621
Application Number:	16212622
Application Number:	16212616
Application Number:	17982474
Application Number:	62753878
Application Number:	62773164
Application Number:	16212643
Application Number:	16212645
Application Number:	16212646
Application Number:	16212642
Application Number:	17984228
Application Number:	62775886
Application Number:	62926382
Application Number:	16684128
Application Number:	16698942
Application Number:	18667960
Application Number:	62792123
Application Number:	62797910
Application Number:	16355653
Application Number:	16355656
Application Number:	16355659
Application Number:	16355648
Application Number:	18384576
Application Number:	62796029
Application Number:	62798364
Application Number:	16427302
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Application Number:	62838629
Application Number:	16453622

Property Type	Number
Application Number:	62866599
Application Number:	16525445
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Application Number:	16547506
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Application Number:	18377818
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Application Number:	18405440
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Application Number:	62933960
Application Number:	17093278

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Application Number:	63178933
Application Number:	17306744
Application Number:	17306742
Application Number:	63178889
Application Number:	17696812
Application Number:	17696819
Application Number:	17696809
Application Number:	63243686
Application Number:	17543471
Application Number:	17543474
Application Number:	17543446
Application Number:	63242184
Application Number:	63252132
Application Number:	17861091
Application Number:	17861095
Application Number:	17861090
Application Number:	63294571
Application Number:	18088725

Property Type	Number
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Application Number:	18088727
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Application Number:	63437098
Application Number:	63438630
Application Number:	18115616
Application Number:	18115618
Application Number:	18115622
Application Number:	63464334
Application Number:	18402135
Application Number:	63547196
Application Number:	63636091
Application Number:	63616453
Application Number:	18416265
Application Number:	18416268
Application Number:	63572232
Application Number:	18824090
Application Number:	63189516
Application Number:	17696810
Application Number:	18151581
Application Number:	18416266
Application Number:	18824034

CORRESPONDENCE DATA

Fax Number: 7043317598

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.

Phone: 7043317400

Email: sepatents@klgates.com,tricia.walker@klgates.com

Correspondent Name: David Easwaran

Address Line 1: 300 South Tryon Street

Address Line 2: Ste 1000

Address Line 4: Charlotte, NORTH CAROLINA 28202

ATTORNEY DOCKET NUMBER:	2040741.03817
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NAME OF SUBMITTER:	Tricia Walker
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SIGNATURE:	Tricia Walker
DATE SIGNED:	10/31/2024
Total Attachments: 10 source=2024-10-02 - Perceive-AZ Services - Executed Patent Assignment#page1.tiff source=2024-10-02 - Perceive-AZ Services - Executed Patent Assignment#page2.tiff source=2024-10-02 - Perceive-AZ Services - Executed Patent Assignment#page3.tiff source=2024-10-02 - Perceive-AZ Services - Executed Patent Assignment#page4.tiff source=2024-10-02 - Perceive-AZ Services - Executed Patent Assignment#page5.tiff source=2024-10-02 - Perceive-AZ Services - Executed Patent Assignment#page6.tiff source=2024-10-02 - Perceive-AZ Services - Executed Patent Assignment#page7.tiff source=2024-10-02 - Perceive-AZ Services - Executed Patent Assignment#page8.tiff source=2024-10-02 - Perceive-AZ Services - Executed Patent Assignment#page9.tiff source=2024-10-02 - Perceive-AZ Services - Executed Patent Assignment#page10.tiff	

PATENT ASSIGNMENT AGREEMENT

THIS PATENT ASSIGNMENT AGREEMENT (this “*Assignment*”), dated as of October 2, 2024 (the “*Effective Date*”), is made by and between Amazon.com Services LLC, a Delaware limited liability company (“*Assignee*”) and Perceive Corporation, a Delaware corporation (“*Assignor*”). Each of Assignee and Assignor are sometimes individually referred to herein as a “*Party*” and are sometimes collectively referred to herein as the “*Parties*.” Capitalized terms not otherwise defined in the text of this Assignment shall have the meanings set forth in the Purchase Agreement (as defined below).

RECITALS

WHEREAS, Assignor and Assignee have entered into an Asset Purchase Agreement, dated as of August 14, 2024 (as amended, the “*Purchase Agreement*”);

WHEREAS, pursuant to the Purchase Agreement, the Parties have agreed that Assignor will sell all of its right, title, and interest in and to the issued patents and patent applications listed in Annex 1 (the “*Transferred Patents*”);

WHEREAS, pursuant to the Purchase Agreement, the Parties have agreed that Assignee will acquire all Assignor’s right, title and interest in and to the Transferred Patents from Assignor; and

WHEREAS, it is a condition precedent to the Closing that Assignor and Assignee execute and deliver this Assignment.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing and the covenants and agreements contained herein, and for other good and valuable consideration (the receipt and sufficiency of which are hereby acknowledged), the Parties hereby agree as follows:

1. Assignment of Rights. Effective as of the Closing, Assignor does hereby irrevocably sell, convey, assign and transfer to Assignee and its successors and assigns, and Assignee does hereby unconditionally accept, (a) Assignor’s entire right, title and interest in, to and under the Transferred Patents; (b) all licenses and similar contractual rights or permissions, whether exclusive or nonexclusive, to the extent such licenses, rights or permissions are (i) granted in respect of any of the Transferred Patents and (ii) sublicenseable or assignable; (c) all royalties, fees, income, payments, and other proceeds now or hereafter due or payable to the Assignor with respect to any of the foregoing; (d) all claims, causes of action and enforcement rights, whether currently pending, filed, or otherwise, with respect to the Transferred Patents, including all rights to damages, injunctive relief and other remedies for past, current and future infringement of the Transferred Patents; and (e) all other rights, privileges and protections of any kind whatsoever of Assignor accruing under any of the foregoing.

2. Further Assurances. Assignor covenants and agrees that, at any time and from time to time upon the written request of Assignee, Assignor shall provide any further necessary documentation and do all further acts reasonably requested by Assignee to confirm and perfect

title in and to the Transferred Patents in Assignee, its successors and assigns. Assignor hereby authorizes the Commissioner for Patents of the United States Patent and Trademark Office, and any other government authority to record and register this Assignment upon request by Assignee.

3. No Representations. Assignor makes no representations or warranties whatsoever under this Assignment with respect to the Transferred Patents. The representations and warranties expressly set forth in the Purchase Agreement are the exclusive representations and warranties made by Assignor with respect to the Transferred Patents. Assignor disclaims all liability and responsibility for any other representation or warranty.

4. Severability. If any term or other provision of this Assignment is invalid, illegal, or incapable of being enforced by any rule of law, or public policy, all other conditions and provisions of this Assignment shall nevertheless remain in full force and effect so long as the economic or legal substance of the Assignment is not affected in any manner adverse to any party hereto. Upon such determination that any term or other provision is invalid, illegal, or incapable of being enforced, the parties shall negotiate in good faith to modify this Assignment so as to effect the original intent of the parties to the fullest extent possible.

5. Binding Effect. Each provision of this Assignment shall extend to and shall bind and inure to the benefit of Assignor and Assignee and their respective heirs, legal representatives, successors and assigns.

6. Entire Agreement. This Assignment and the Purchase Agreement constitute the entire agreement among the parties with respect to the subject matter hereof and thereof and supersede all prior (but not concurrent) agreements and undertakings, both written and oral, among the parties, or any of them, with respect to the subject matter hereof and thereof.

7. Governing Law. This Assignment shall be governed by, and construed in accordance with, the laws of the State of Delaware, without giving effect to any choice or conflict of law, provision, or rule that would cause the application of laws of any other jurisdiction. In any action among or between any of the parties arising out of or relating to this Assignment, including any action seeking equitable relief, each of the parties irrevocably and unconditionally consents and submits to the exclusive jurisdiction and venue of the state and federal courts located in Wilmington, Delaware. EACH PARTY HEREBY IRREVOCABLY WAIVES ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING (WHETHER BASED ON CONTRACT, TORT, OR OTHERWISE) ARISING OUT OF OR RELATING TO THIS ASSIGNMENT AND THE OTHER OPERATIVE DOCUMENTS, THE TRANSACTIONS, OR THE ACTIONS OF SUCH PARTIES IN THE NEGOTIATION, ADMINISTRATION, PERFORMANCE, AND ENFORCEMENT HEREOF AND THEREOF.

8. Counterparts. This Assignment may be executed and delivered in one or more counterparts, either manually or electronically (including by PDF and electronic mail), each of which shall be deemed to be an original but all of which together shall constitute one and the same agreement. No counterpart shall be effective unless and until each party has executed at least one counterpart.

9. Nothing in this Assignment shall be construed to be a modification of, or limitation on, any provision of the Purchase Agreement, including the representations, warranties and agreements set forth therein. If any conflict exists between the terms of this Assignment and

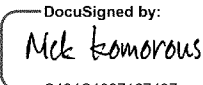
the terms of the Purchase Agreement, the terms of the Purchase Agreement shall govern and control.

[Signature Page Follows]

IN WITNESS WHEREOF, Assignor and Assignee have caused this Assignment to be duly executed as of the date first written above.

AMAZON.COM SERVICES LLC

PERCEIVE CORPORATION

By: 
Name: Nick Komorous
Title: Authorized Signatory

By: _____
Name:
Title:

Address:

Amazon.com Services LLC
c/o Amazon.com, Inc.
410 Terry Avenue North
Seattle, Washington 98109
Attention: General Counsel

Address:

with a copy to (which shall not constitute notice):

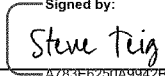
Gibson, Dunn & Crutcher LLP
10 University Ave
Palo Alto, CA 94301
Attention: Ed Batts
E-mail: ebatts@gibsondunn.com

IN WITNESS WHEREOF, Assignor and Assignee have caused this Assignment to be duly executed as of the date first written above.

AMAZON.COM SERVICES LLC

PERCEIVE CORPORATION

By: _____
Name:
Title:

Signed by:
By:  _____
Name: Steve Teig
Title: Co-CEO

Address:

Address:

2190 Gold Street
San Jose, CA 95002

[Signature Page to Patent Assignment Agreement]

PATENT
REEL: 069288 FRAME: 0742

**ANNEX 1
TO PATENT ASSIGNMENT AGREEMENT**

Transferred Patents

[See separate attachment]

[illegible]

MACHINE-TRAINED NETWORK DETECTING CONTEXT SENSITIVE	TEIG, Steven L.
COMPRESSIVE SENSING BASED IMAGE CAPTURE DEVICE	MOHAMMED Iyaz
COMPRESSIVE SENSING BASED IMAGE CAPTURE DEVICE	MOHAMMED Iyaz
COMPRESSIVE SENSING BASED IMAGE CAPTURE DEVICE	MOHAMMED Iyaz
COMPRESSIVE SENSING BASED IMAGE CAPTURE USING MULTIPLE	MOHAMMED Iyaz
COMPRESSIVE SENSING BASED IMAGE CAPTURE USING DYNAMIC	MOHAMMED Iyaz
TRAINING NETWORK FOR COMPRESSIVE SENSING BASED IMAGE	MOHAMMED Iyaz
COMPRESSIVE SENSING BASED IMAGE PROCESSING	MOHAMMED Iyaz
COMPRESSIVE SENSING BASED IMAGE CAPTURE USING DIFFERENTIAL	MOHAMMED Iyaz
COMPRESSIVE SENSING BASED IMAGE CAPTURE USING DIFFERENTIAL	MOHAMMED Iyaz
NEURAL NETWORK INFERENCE CIRCUIT	DUONG, Kenneth; KO, Jung; TEIG, Steven L.
CONTROL CIRCUITS FOR NEURAL NETWORK INFERENCE CIRCUIT	DUONG, Kenneth; KO, Jung; TEIG, Steven L.
COPY OF NEURAL NETWORK NODE BY NEURAL NETWORK NODE	DUONG, Kenneth; TEIG, Steven L.; KO, Jung
DOT PRODUCT COMPUTATIONS ON NEURAL NETWORK INFERENC	DUONG, Kenneth; KO, Jung; TEIG, Steven L.
DOT PRODUCT COMPUTATIONS ON NEURAL NETWORK INFERENC	DUONG, Kenneth; KO, Jung; TEIG, Steven L.
DOT PRODUCT COMPUTATIONS ON NEURAL NETWORK INFERENC	DUONG, Kenneth; KO, Jung; TEIG, Steven L.
SPLITTING NEURAL NETWORK FILTERS FOR IMPLEMENTATION BY	KO, Jung; DUONG, Kenneth; TEIG, Steven L.
THE-MULTIPLYED DOT PRODUCTS FOR NEURAL NETWORK INFER	KO, Jung; DUONG, Kenneth; TEIG, Steven L.
USING QUANTARY WEIGHTS WITH NEURAL NETWORK INFERENCE	DUONG, Kenneth; KO, Jung; TEIG, Steven L.
COPY OF NEURAL NETWORK NODE WITH LARGE INPUT	DUONG, Kenneth; KO, Jung; TEIG, Steven L.
REPLICATION OF NEURAL NETWORK LAYERS	TEIG, Steven L.; SMITHEN, Eric A.
EXECUTING REPLICATED NEURAL NETWORK LAYERS ON INTERME	SMITHEN, Eric A.; TEIG, Steven L.
REPLICATION OF NEURAL NETWORK LAYERS	SMITHEN, Eric A.; TEIG, Steven L.
EXECUTING REPLICATED NEURAL NETWORK LAYERS ON INTERME	SMITHEN, Eric A.; TEIG, Steven L.
NEURAL NETWORK INFERENCE CIRCUIT ACTIVATION VALUE STOR	KO, Jung; TEIG, Steven L.; DUONG, Kenneth
NEURAL NETWORK INFERENCE CIRCUIT ACTIVATION VALUE STOR	KO, Jung; TEIG, Steven L.; DUONG, Kenneth
INPUT VALUE CACHE FOR TEMPORARILY STORING INPUT VALUES	KO, Jung; TEIG, Steven L.; DUONG, Kenneth
STORAGE OF INPUT VALUES ACROSS MULTIPLE CORRES OF NEUR	KO, Jung; TEIG, Steven L.; DUONG, Kenneth
SHIFTING INPUT VALUES WITHIN INPUT BUFFER OF NEURAL NETW	KO, Jung; TEIG, Steven L.; DUONG, Kenneth
STORAGE OF INPUT VALUES ACROSS MULTIPLE CORRES OF NEUR	KO, Jung; TEIG, Steven L.; DUONG, Kenneth
NEURAL NETWORK INFERENCE CIRCUIT EMPLOYING DYNAMIC P	KO, Jung; DUONG, Kenneth; TEIG, Steven L.
NEURAL NETWORK INFERENCE CIRCUIT EMPLOYING DYNAMIC P	KO, Jung; DUONG, Kenneth; TEIG, Steven L.
NEURAL NETWORK INFERENCE CIRCUIT EMPLOYING DYNAMIC P	KO, Jung; DUONG, Kenneth; TEIG, Steven L.
MODIFICATION OF MACHINE-TRAINED NETWORK HYPERPARAMET	SMITHEN, Eric A.; TEIG, Steven L.
ITERATIVE TRANSFER OF MACHINE-TRAINED NETWORK INPUTS F	SMITHEN, Eric A.; TEIG, Steven L.
MODIFICATION OF MACHINE-TRAINED NETWORK HYPERPARAMET	SMITHEN, Eric A.; TEIG, Steven L.
COMPILE FOR OPTIMIZING NEURAL NETWORK IMPLEMENTATIO	TEIG, Steven L.; THOMAS, Brian
COMPILE FOR OPTIMIZING NEURAL NETWORK IMPLEMENTATIO	TEIG, Steven L.; THOMAS, Brian
COMPILE FOR OPTIMIZING NUMBER OF CORES USED TO IMPL	THOMAS, Brian; TEIG, Steven L.
COMPILE FOR IMPLEMENTING MEMORY SHUDOWN FOR NEUR	THOMAS, Brian; TEIG, Steven L.
COMPILE FOR IMPLEMENTING GATING FUNCTIONS FOR NEUR	THOMAS, Brian; TEIG, Steven L.
COMPILE FOR OPTIMIZING FILTER SPARSITY FOR NEURAL NETW	THOMAS, Brian; TEIG, Steven L.
COMPILE FOR PERFORMING ZERO-COMPONENT REMOVAL	THOMAS, Brian; TEIG, Steven L.
ENCODING OF WEIGHT VALUES STORED ON NEURAL NETWORK	DUONG, Kenneth; KO, Jung; TEIG, Steven L.

Perceive Corporation	In Force	US	16/457,757	6/28/2019	11,210,586	12/28/2021	
Perceive Corporation	Allowed	US	17/550,177	12/14/2021			
Perceive Corporation	Lapsed	US	62/873,864	7/12/2019			
Perceive Corporation	Allowed	US	16/537,481	8/9/2019			
Perceive Corporation	In Force	US	16/537,478	8/9/2019	11,586,910	2/21/2023	
Perceive Corporation	Lapsed	US	62/946,188	12/10/2019			
Perceive Corporation	In Force	US	16/717,926	12/17/2019	11,568,227	1/31/2023	
Perceive Corporation	Pending	US	16/717,925	12/17/2019			
Perceive Corporation	Lapsed	US	62/886,888	8/14/2019			
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Perceive Corporation	Pending	US	18/377,818	10/8/2023	20240046031	2/8/2024	
Perceive Corporation	Lapsed	US	62/913,707	10/10/2019			
Perceive Corporation	In Force	US	16/790,842	2/9/2020	11,900,238	2/13/2024	
Perceive Corporation	Allowed	US	16/780,843	2/9/2020			
Perceive Corporation	In Force	US	16/780,841	2/9/2020			
Perceive Corporation	Lapsed	US	62/888,413	8/16/2019	11,610,154	3/21/2023	
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Perceive Corporation	In Force	US	16/584,890	9/26/2019	11,620,485	4/4/2023	
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Perceive Corporation	In Force	US	16/596,177	10/8/2019	20210034982	2/4/2021	11,847,568
Perceive Corporation	In Force	US	16/596,187	10/8/2019	20210034955	2/4/2021	11,494,657
Perceive Corporation	Pending	US	18/542,537	12/15/2023	20240193456	6/13/2024	
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Perceive Corporation	Lapsed	US	62/955,349	12/30/2019			
Perceive Corporation	In Force	US	16/923,001	7/7/2020	11,995,555	5/28/2024	
Perceive Corporation	Allowed	US	16/923,002	7/7/2020			
Perceive Corporation	Lapsed	US	62/933,960	11/11/2019			
Perceive Corporation	In Force	US	17/093,285	11/8/2020	11,948,067	4/2/2024	Terminal disclaimer over 17/093,286
Perceive Corporation	Pending	US	17/093,278	11/8/2020			Terminal disclaimer over 11,948,067 and 11,941,511
Perceive Corporation	In Force	US	17/093,296	11/8/2020	11,941,511	3/26/2024	Terminal disclaimer over 17/093,278
Perceive Corporation	Lapsed	US	62/975,539	2/12/2020			
Perceive Corporation	In Force	US	16/923,003	7/7/2020	11,847,567	12/19/2023	
Perceive Corporation	Allowed	US	16/923,004	7/7/2020			
Perceive Corporation	In Force	US	16/923,006	7/7/2020	12,045,725	7/23/2024	
Perceive Corporation	Lapsed	US	63/085,472	8/13/2020			
Perceive Corporation	Allowed	US	17/089,653	11/4/2020	12,061,988	8/13/2024	Terminal disclaimer over 17/089,660
Perceive Corporation	Pending	US	17/089,660	11/4/2020	12,061,981	8/13/2024	
Perceive Corporation	Lapsed	US	63/117,976	11/24/2020			
Perceive Corporation	Pending	US	17/189,220	3/11/2021			
Perceive Corporation	Allowed	US	63/117,375	11/23/2020			
Perceive Corporation	Lapsed	US	17/532,903	11/22/2021			
Perceive Corporation	Pending	US	17/532,903	4/23/2021			
Perceive Corporation	Lapsed	US	63/178,933	4/23/2021			
Perceive Corporation	Pending	US	17/306,744	5/9/2021			
Perceive Corporation	Pending	US	17/306,745	5/9/2021			
Perceive Corporation	Allowed	US	17/306,742	5/9/2021			
Perceive Corporation	Lapsed	US	63/178,889	4/23/2021			
Perceive Corporation	Lapsed	US	63/189,516	5/17/2021			
Perceive Corporation	Pending	US	17/696,810	3/16/2022			
Perceive Corporation	Pending	US	17/696,812	3/16/2022			

WEIGHT VALUE DECODER OF NEURAL NETWORK INFERENCE CIR DUONG, Kenneth, KO, Jung, TEIG, Steven L.	
WEIGHT VALUE DECODER OF NEURAL NETWORK INFERENCE CIR DUONG, Kenneth, KO, Jung, TEIG, Steven L.	
BUS FOR TRANSPORTING OUTPUT VALUES OF NEURAL NETWORK KO, Jung, DUONG, Kenneth, TEIG, Steven L.	
BUS FOR TRANSPORTING OUTPUT VALUES OF NEURAL NETWORK DUONG, Kenneth, KO, Jung, TEIG, Steven L.	
WRITE CACHE FOR NEURAL NETWORK INFERENCE CIRCUIT DUONG, Kenneth, KO, Jung, TEIG, Steven L.	
READ CONTROLLER OPERATIONS FOR NEURAL NETWORK INFERNI TEIG, Steven L.; KO, Jung, DUONG, Kenneth	
NEURAL NETWORK INFERENCE CIRCUIT READ CONTROLLER WIT TEIG, Steven L.; KO, Jung, DUONG, Kenneth	
ADDRESS DECODING BY NEURAL NETWORK INFERENCE CIRCUIT TEIG, Steven L.; KO, Jung, DUONG, Kenneth	
NON-DOT PRODUCT COMPUTATIONS FOR NEURAL NETWORK IN KO, Jung, DUONG, Kenneth, TEIG, Steven L.	
NON-DOT PRODUCT COMPUTATIONS ON NEURAL NETWORK INF KO, Jung, DUONG, Kenneth, TEIG, Steven L.	
DATA TRANSFER FOR NON-DOT PRODUCT COMPUTATIONS ON N KO, Jung, DUONG, Kenneth, TEIG, Steven L.	
DATA TRANSFER FOR NON-DOT PRODUCT COMPUTATIONS ON N KO, Jung, DUONG, Kenneth, TEIG, Steven L.	
HYPERPARAMETER MODIFICATION TEIG, Steven L.; SATHIER, Eric A.	
REDUCING COMPLEXITY OF MACHINE-TRAINED NETWORK TEIG, Steven L.; SATHIER, Eric A.	
OPTIMIZING LOSS FUNCTION DURING TRAINING OF NETWORK TEIG, Steven L.; SATHIER, Eric A.	
PREVENTING OVERFITTING OF HYPERPARAMETERS DURING TRAI TEIG, Steven L.; SATHIER, Eric A.	
NEURAL NETWORKS WITH SPATIAL AND TEMPORAL FEATURES MIHAL, Andrew; TEIG, Steven L.; SATHIER, Eric A.	
NEURAL NETWORKS WITH SPATIAL AND TEMPORAL FEATURES MIHAL, Andrew; TEIG, Steven L.; SATHIER, Eric A.	
NEURAL NETWORKS WITH SPATIAL AND TEMPORAL FEATURES MIHAL, Andrew; TEIG, Steven L.; SATHIER, Eric A.	
CIRCUIT FOR EXECUTING STATEFUL NEURAL NETWORK MIHAL, Andrew; TEIG, Steven L.; SATHIER, Eric A.	
VIDEO DENOISING USING NEURAL NETWORKS WITH SPATIAL ANI MIHAL, Andrew; TEIG, Steven L.; SATHIER, Eric A.	
CIRCUIT FOR EXECUTING STATEFUL NEURAL NETWORK MIHAL, Andrew; TEIG, Steven L.; SATHIER, Eric A.	
QUANTIZING NEURAL NETWORKS SATHIER, Eric A.; TEIG, Steven L.	
QUANTIZING NEURAL NETWORKS USING SHIFTING AND SCALING SATHIER, Eric A.; TEIG, Steven L.	
QUANTIZING NEURAL NETWORKS USING APPROXIMATE QUANTIZ SATHIER, Eric A.; TEIG, Steven L.	
QUANTIZING NEURAL NETWORKS USING SHIFTING AND SCALING SATHIER, Eric A.; TEIG, Steven L.	
TRAINING A NEURAL NETWORK WITH QUANTIZED WEIGHTS DRIMBAREAN, Alexandru, TEIG, Steven L.	
TRAINING A NEURAL NETWORK WITH QUANTIZED WEIGHTS DRIMBAREAN, Alexandru, TEIG, Steven L.	
TRAINING A NEURAL NETWORK WITH QUANTIZED WEIGHTS DRIMBAREAN, Alexandru, TEIG, Steven L.	
INITIALIZATION OF VALUES FOR TRAINING A NEURAL NETWORK V DRIMBAREAN, Alexandru, TEIG, Steven L.	
STORING OF INTERMEDIATE COMPUTED VALUES FOR SUBSEQU TEIG, Steven L.; CASSIDY, Ryan J.	
STORING OF INTERMEDIATE COMPUTED VALUES FOR SUBSEQU TEIG, Steven L.; CASSIDY, Ryan J.	
STORING OF INTERMEDIATE COMPUTED VALUES FOR SUBSEQU TEIG, Steven L.; CASSIDY, Ryan J.	
STORING OF INTERMEDIATE COMPUTED VALUES FOR SUBSEQU TEIG, Steven L.; CASSIDY, Ryan J.	
LOSS-AWARE REPLICATION OF NEURAL NETWORK LAYERS SATHIER, Eric A.; TEIG, Steven L.; DRIMBAREAN, Alexandru	
LOSS-AWARE REPLICATION OF NEURAL NETWORK LAYERS SATHIER, Eric A.; TEIG, Steven L.; DRIMBAREAN, Alexandru	
OPTIMIZING GLOBAL SPARSITY FOR NEURAL NETWORK SATHIER, Eric A.; TEIG, Steven L.	
BATCH NORMALIZATION FOR REPLICATED LAYERS OF NEURAL N SATHIER, Eric A.; TEIG, Steven L.	
DECOMPOSITION OF LAYER IN QUANTIZED NETWORK SATHIER, Eric A.; TEIG, Steven L.	
DECOMPOSITION OF TERNARY WEIGHT TENSORS SATHIER, Eric A.; TEIG, Steven L.	
DECOMPOSITION OF WEIGHT TENSORS IN NETWORK WITH VALU SATHIER, Eric A.; TEIG, Steven L.	
SPARSIFICATION OF DECOMPOSED NETWORK LAYERS SATHIER, Eric A.; TEIG, Steven L.	
DIVISION OF NEURAL NETWORK INPUTS TANTIONGLOOC, Justin, THOMAS, Brian, TEIG, Steven L.	
EXECUTION OF MACHINE-TRAINED NETWORK TANTIONGLOOC, Justin, THOMAS, Brian, TEIG, Steven L.	
GENERATION OF MACHINE-TRAINED NETWORK INSTRUCTIONS TANTIONGLOOC, Justin, THOMAS, Brian, TEIG, Steven L.	
VISUAL WAKE CONTENT FOR IMAGE PROCESSING TEIG, Steven L.; KIZILGUL, Serdar, DHARAN, Murali	
VISUAL WAKE CONTENT FOR IMAGE PROCESSING TEIG, Steven L.; KIZILGUL, Serdar, DHARAN, Murali	
UNITED MEMORY FOR INTEGRATED CIRCUIT EXECUTING NEURA KO, Jung, DUONG, Kenneth, TEIG, Steven L.; RHEE, Won	
UNITED MEMORY FOR INTEGRATED CIRCUIT EXECUTING NEURA KO, Jung, DUONG, Kenneth, TEIG, Steven L.; RHEE, Won	
ALLOCATING BLOCKS OF UNIFIED MEMORY FOR INTEGRATED CII KO, Jung, DUONG, Kenneth, TEIG, Steven L.; RHEE, Won	
BUFFERING OF NEURAL NETWORK INPUTS AND OUTPUTS KO, Jung, DUONG, Kenneth, TEIG, Steven L.; RHEE, Won	
INSERTION OF ACTIVATION FUNCTIONS INTO DECOMPOSED LAY SATHIER, Eric A.; TEIG, Steven L.	
INSERTION OF ACTIVATION FUNCTIONS INTO DECOMPOSED LAY SATHIER, Eric A.; TEIG, Steven L.	
DECOMPOSITION OF WEIGHT TENSORS FOR STRUCTURAL SPARS SATHIER, Eric A.; TEIG, Steven L.	
DECOMPOSITION OF WEIGHT TENSORS FOR STRUCTURAL SPARS SATHIER, Eric A.; TEIG, Steven L.	

Perceive Corporation	Pending	US	17/696,819	3/16/2022
Perceive Corporation	Pending	US	17/696,809	3/16/2022
Perceive Corporation	Lapsed	US	63/243,686	9/13/2021
Perceive Corporation	Pending	US	17/543,471	12/6/2021
Perceive Corporation	Pending	US	17/543,474	12/6/2021
Perceive Corporation	Pending	US	17/543,446	12/6/2021
Perceive Corporation	Lapsed	US	63/242,184	9/9/2021
Perceive Corporation	Lapsed	US	63/252,132	10/4/2021
Perceive Corporation	Pending	US	17/861,091	7/8/2022
Perceive Corporation	Pending	US	17/861,095	7/8/2022
Perceive Corporation	Pending	US	17/861,090	7/8/2022
Perceive Corporation	Lapsed	US	63/294,571	12/29/2021
Perceive Corporation	Pending	US	18/098,725	12/26/2022
Perceive Corporation	Pending	US	18/098,726	12/26/2022
Perceive Corporation	Pending	US	18/098,727	12/26/2022
Perceive Corporation	Lapsed	US	63/388,044	7/11/2022
Perceive Corporation	Pending	US	18/115,553	2/28/2023
Perceive Corporation	Lapsed	US	63/400,639	8/24/2022
Perceive Corporation	Pending	US	18/115,579	2/28/2023
Perceive Corporation	Pending	US	18/115,580	2/28/2023
Perceive Corporation	Pending	US	18/115,581	2/28/2023
Perceive Corporation	Lapsed	US	63/497,098	1/4/2023
Perceive Corporation	Lapsed	US	63/498,630	1/12/2023
Perceive Corporation	Pending	US	18/115,616	2/28/2023
Perceive Corporation	Pending	US	18/115,618	2/28/2023
Perceive Corporation	Pending	US	18/115,622	2/28/2023
Perceive Corporation	Lapsed	US	63/464,334	5/5/2023
Perceive Corporation	Pending	US	18/402,135	1/2/2024
Perceive Corporation	Pending	US	63/547,196	11/3/2023
Perceive Corporation	Pending	US	63/636,091	4/18/2024
Perceive Corporation	Pending	US	63/616,453	12/29/2023
Perceive Corporation	Pending	US	18/416,265	1/18/2024
Perceive Corporation	Pending	US	18/416,266	1/18/2024
Perceive Corporation	Pending	US	18/416,268	1/18/2024
Perceive Corporation	Pending	US	63/572,232	3/30/2024
Perceive Corporation	Pending	US	18/824,090	9/4/2024
Perceive Corporation	Pending	US	18/824,034	9/4/2024

ACCOUNTING FOR COMPUTE TIME IN TRAINING OF NETWORK	SATHER, Eric A.; TIEG, Steven L.
PROBABILISTIC PROJECTION OF NETWORK PARAMETERS	SATHER, Eric A.; TIEG, Steven L.
NEURAL NETWORK INFERENCE CIRCUIT FOR EXECUTING ATTENT DUONG, Kenneth, KO, Jung; TIEG, Steven L.	
NEURAL NETWORK INFERENCE CIRCUIT WITH PIECEWISE LINEAR DUONG, Kenneth, KO, Jung; TIEG, Steven L.; RHEE, Won	
NEURAL NETWORK INFERENCE CIRCUIT PERFORMING MATRIX M DUONG, Kenneth, KO, Jung; TIEG, Steven L.; THOMAS, Brian	
NEURAL NETWORK INFERENCE CIRCUIT FOR EXECUTING ATTENT DUONG, Kenneth, KO, Jung; TIEG, Steven L.; THOMAS, Brian	
ADJUSTING LEARNING RATE FOR TRAINING NEURAL NETWORKS	SATHER, Eric A.; TIEG, Steven L.
ADJUSTING LEARNING RATE IN NEURAL NETWORKS	SATHER, Eric A.; TIEG, Steven L.
ADJUSTING LEARNING RATE FOR TRAINING SECTION OF NEURAL NETWORK	SATHER, Eric A.; TIEG, Steven L.; SORKIN, Evgeny
ADJUSTING LEARNING RATE FOR TRAINING NEURAL NETWORK	SATHER, Eric A.; TIEG, Steven L.; SORKIN, Evgeny
SCHEDULING LINE SEARCH FOR NEURAL NETWORK TRAINING	SATHER, Eric A.; TIEG, Steven L.; SORKIN, Evgeny
SELECTION OF INPUTS FOR TRAINING MACHINE-TRAINED NETWORK TIEG, Steven L.; SATHER, Eric A.; SIEGEL, Andrew; SORKIN, Evg	
WEIGHTED SELECTION OF INPUTS FOR TRAINING MACHINE-TRAINED NETWORK TIEG, Steven L.; SATHER, Eric A.; SIEGEL, Andrew; SORKIN, Evg	
SELECTION OF TRAINING INPUTS BASED ON NETWORK VALIDITY TIEG, Steven L.; SATHER, Eric A.; SIEGEL, Andrew; SORKIN, Evg	
NEURAL NETWORK LOSS FUNCTION THAT INCORPORATES INCOI SHAROS, Phillip; TIEG, Steven L.	
NEURAL NETWORK LOSS FUNCTION THAT INCORPORATES INCOI SHAROS, Phillip; TIEG, Steven L.	
ENCODING NEURAL NETWORK ACTIVATIONS USING AFFINE TRANSFORMS TO ENHANCE SATHER, Eric A.; TIEG, Steven L.	
NEURAL NETWORK CIRCUIT USING AFFINE TRANSFORMS TO ENHANCE SATHER, Eric A.; TIEG, Steven L.	
NEURAL NETWORK CIRCUIT USING AFFINE TRANSFORMS TO ENHANCE SATHER, Eric A.; TIEG, Steven L.	
OPTIMIZING ACTIVATION RANGES FOR NEURAL NETWORK	SATHER, Eric A.; TIEG, Steven L.
TRAINING NETWORK BASED ON EXISTING NETWORK	TIEG, Steven L.; SORKIN, Evgeny; SATHER, Eric A.
TRAINING NETWORK BASED ON EXISTING NETWORK	TIEG, Steven L.; SORKIN, Evgeny; SATHER, Eric A.
TRAINING NEW NETWORK BASED ON EXISTING NETWORK BY COI TIEG, Steven L.; SORKIN, Evgeny; SATHER, Eric A.	
EQUIVALENT OUTPUT FORMAT FOR TRAINING NEW NETWORK BA TIEG, Steven L.; SORKIN, Evgeny; SATHER, Eric A.	
LOSS FUNCTION FOR TRAINING NEW NETWORK BASED ON EXISTING TIEG, Steven L.; SORKIN, Evgeny; SATHER, Eric A.	
TRAINING NATURAL LANGUAGE PROCESSING NETWORK BASED ON TIEG, Steven L.; SATHER, Eric A.; SORKIN, Evgeny	
TRAINING NATURAL LANGUAGE PROCESSING NETWORK BASED ON TIEG, Steven L.; SATHER, Eric A.; SORKIN, Evgeny	
IDENTIFICATION OF OPTIMAL NEURAL NETWORK LAYER DECOMPOSITION KO, Jung; DUONG, Kenneth; AISENBERG, James Maxwell	
IDENTIFICATION OF OPTIMAL NEURAL NETWORK LAYER DECOMPOSITION KO, Jung; DUONG, Kenneth; AISENBERG, James Maxwell	
DOT PRODUCT COMPUTATION CIRCUITS	KO, Jung; DUONG, Kenneth; THOMAS, Brian
DOT PRODUCT COMPUTATION CIRCUITS FOR HANDLING QUINAI KO, Jung; DUONG, Kenneth; THOMAS, Brian	
DOT PRODUCT COMPUTATION CIRCUITS FOR HANDLING DIFFER KO, Jung; DUONG, Kenneth; THOMAS, Brian	
REDUCING INPUTS TO DOT PRODUCT COMPUTATION CIRCUITS	KO, Jung; DUONG, Kenneth; THOMAS, Brian
RANDOMIZED ROUNDING FOR WEIGHT QUANTIZATION	TIEG, Steven L.
INITIALIZATION OF VALUES FOR TRAINING A NEURAL NETWORK DRIMBARTEAN, Alexander; TIEG, Steven L.	
BUS FOR TRANSPORTING OUTPUT VALUES OF A NEURAL NETWORK KO, Jung; DUONG, Kenneth; TIEG, Steven L.	

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