

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT6833561

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
ARJUN BHARGAVA	03/30/2021
HAOFENG CHEN	04/22/2021
ADRIEN DAVID GAIDON	03/30/2021
RARES A. AMBRUS	03/30/2021
SUDEEP PILLAI	04/14/2021
RECEIVING PARTY DATA	
Name:	TOYOTA RESEARCH INSTITUTE, INC.
Street Address:	4440 EL CAMINO REAL
City:	LOS ALTOS
State/Country:	CALIFORNIA
Postal Code:	94022
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	17242046
CORRESPONDENCE DATA	
Fax Number:	(310)201-5219
<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>	
Phone:	3102777200
Email:	LAXIPDocket@seyfarth.com
Correspondent Name:	SEYFARTH SHAW LLP / TOYOTA RESEARCH INSTITUTE INC.
Address Line 1:	2029 CENTURY PARK EAST, SUITE 3500
Address Line 4:	LOS ANGELES, CALIFORNIA 90067-3021
ATTORNEY DOCKET NUMBER:	2020-451/IP-A-4872/TRI216
NAME OF SUBMITTER:	JOSEPH LUTZ
SIGNATURE:	/Joseph Lutz/
DATE SIGNED:	07/27/2021
Total Attachments: 15	
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ASSIGNMENT

WHEREAS, WE,

1. **Arjun BHARGAVA**, a citizen of the United States of America, having a mailing address located at 4440 El Camino Real, Los Altos, California 94022, U.S.A. and a resident of San Francisco, California,
2. **Haofeng CHEN**, a citizen of China, having a mailing address located at 4440 El Camino Real, Los Altos, California 94022, U.S.A. and a resident of Stanford, California,
3. **Adrien David GAIDON**, a citizen of United States, having a mailing address located at 4440 El Camino Real, Los Altos, California 94022, U.S.A. and a resident of Mountain View, California,
4. **Rares A. AMBRUS**, a citizen of Romania, having a mailing address located at 4440 El Camino Real, Los Altos, California 94022, U.S.A. and a resident of Mountain View, California,
5. **Sudeep PILLAI**, a citizen of India, having a mailing address located at 4440 El Camino Real, Los Altos, California 94022, U.S.A. and a resident of Santa Clara, California,

have conceived of one or more processes, methods, machines, articles of manufacture, designs, compositions of matter, inventions, discoveries or new or useful improvements relating to **LEARNING MONOCULAR 3D OBJECT DETECTION FROM 2D SEMANTIC KEYPOINT DETECTION** (collectively the “INVENTIONS”) for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, **TOYOTA RESEARCH INSTITUTE, INC.** (hereinafter “ASSIGNEE”), a California corporation, having a place of business at 4440 El Camino Real, Los Altos, California 94022, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, WE do hereby acknowledge that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, the entire right, title, and interest throughout

the world in and to said INVENTIONS, including all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in the United States, including but not limited to U.S. Application No(s). _____ filed _____, TRI Reference No. **2020-451 / IP-A-4872**, and all provisional applications relating thereto, , (and do hereby authorize ASSIGNEE and its representative to hereafter add herein such application number(s) and/or filing date(s) when known), and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, and design applications thereof, and all issued patents of the United States which may have granted or may be granted hereafter thereon and all reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States;

AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, patent of addition applications, confirmation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at San Francisco, on 3/30/2021

LOCATION

DATE



Arjun BHARGAVA

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at _____, on _____

LOCATION

DATE

Haofeng CHEN

Done at _____, on _____

LOCATION

DATE

Adrien David GAIDON

Done at _____, on _____

LOCATION

DATE

Rares A. AMBRUS

Done at _____, on _____

LOCATION

DATE

Sudeep PILLAI

ASSIGNMENT

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the world in and to said INVENTIONS, including all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in the United States, including but not limited to U.S. Application No(s). _____ filed _____, TRI Reference No. **2020-451 / IP-A-4872**, and all provisional applications relating thereto, , (and do hereby authorize ASSIGNEE and its representative to hereafter add herein such application number(s) and/or filing date(s) when known), and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, and design applications thereof, and all issued patents of the United States which may have granted or may be granted hereafter thereon and all reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States;

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AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at _____, on _____
LOCATION DATE **Arjun BHARGAVA**

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Los Altos, CA 04/22/2021
Done at _____, on _____
LOCATION DATE **Haofeng CHEN**

Done at _____, on _____
LOCATION DATE **Adrien David GAIDON**

Done at _____, on _____
LOCATION DATE **Rares A. AMBRUS**

Done at _____, on _____
LOCATION DATE **Sudeep PILLAI**

ASSIGNMENT

WHEREAS, WE,

1. **Arjun BHARGAVA**, a citizen of the United States of America, having a mailing address located at 4440 El Camino Real, Los Altos, California 94022, U.S.A. and a resident of San Francisco, California,
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WHEREAS, **TOYOTA RESEARCH INSTITUTE, INC.** (hereinafter “**ASSIGNEE**”), a California corporation, having a place of business at 4440 El Camino Real, Los Altos, California 94022, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said **INVENTIONS**, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

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PATENT

TRI Ref. No. 2020-451 / IP-

A-4872

Page 3 of

3


AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at _____, on _____
LOCATION DATE Arjun BHARGAVA

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at _____, on _____
LOCATION DATE Haofeng CHEN

Done at *Mountain View*, on *2021-03-30*
LOCATION DATE 
Adrien David GAIDON

Done at _____, on _____
LOCATION DATE Rares A. AMBRUS

Done at _____, on _____
LOCATION DATE Sudeep PILLAI

ASSIGNMENT

WHEREAS, WE,

1. **Arjun BHARGAVA**, a citizen of the United States of America, having a mailing address located at 4440 El Camino Real, Los Altos, California 94022, U.S.A. and a resident of San Francisco, California,
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have conceived of one or more processes, methods, machines, articles of manufacture, designs, compositions of matter, inventions, discoveries or new or useful improvements relating to **LEARNING MONOCULAR 3D OBJECT DETECTION FROM 2D SEMANTIC KEYPOINT DETECTION** (collectively the “**INVENTIONS**”) for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, **TOYOTA RESEARCH INSTITUTE, INC.** (hereinafter “**ASSIGNEE**”), a California corporation, having a place of business at 4440 El Camino Real, Los Altos, California 94022, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said **INVENTIONS**, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

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hereafter thereon and all reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States;

AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, patent of addition applications, confirmation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

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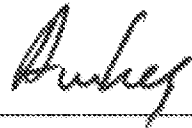
AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at _____, on _____
LOCATION DATE Arjun BHARGAVA

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at _____, on _____
LOCATION DATE Haofeng CHEN

Done at _____, on _____
LOCATION DATE Adrien David GAIDON

Done at San Francisco, on 03/30/2021
LOCATION DATE  Rares A. AMBRUS

Done at _____, on _____
LOCATION DATE Sudeep PILLAI

ASSIGNMENT

WHEREAS, WE,

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AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.


Done at _____, on _____
LOCATION DATE Arjun BHARGAVA

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at _____, on _____
LOCATION DATE Haofeng CHEN

Done at _____, on _____
LOCATION DATE Adrien David GAIDON

Done at _____, on _____
LOCATION DATE Rares A. AMBRUS

Done at Santa Clara, CA, on 04/14/2021
LOCATION DATE  Sudeep PILLAI