505730767 10/18/2019

EPAS ID: PAT5777578

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ROCKY CHAU-HSIUNG LIN	10/10/2019
THOMAS YAMASAKI	10/09/2019
KOICHIRO KANDA	10/10/2019

RECEIVING PARTY DATA

Name:	ALPINE ELECTRONICS OF SILICON VALLEY, INC.
Street Address:	3151 JAY STREET, SUITE 101
City:	SANTA CLARA
State/Country:	CALIFORNIA
Postal Code:	95054

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16657575

CORRESPONDENCE DATA

Fax Number: (650)838-4350

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.

(206) 359-8000 Phone:

Email: patentprocurement@perkinscoie.com PERKINS COIE LLP - SDO GENERAL **Correspondent Name:**

Address Line 1: PO BOX 1247

Address Line 4: SEATTLE, WASHINGTON 98111-1247

ATTORNEY DOCKET NUMBER:	112432-8012.US00
NAME OF SUBMITTER:	CRYSTAL FONG
SIGNATURE:	/Crystal Fong/
DATE SIGNED:	10/18/2019

Total Attachments: 9

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> **PATENT** REEL: 050764 FRAME: 0001 505730767

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> PATENT REEL: 050764 FRAME: 0002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Applicant(s): Alpine Electronics of Silicon Valley, Inc.

Inventor(s): Rocky Chau-Hsiung LIN

Application No.: 16/657,575

Filing Date: October 18, 2019

Title: DETECTION OF UNSAFE CABIN

CONDITIONS IN AUTONOMOUS

VEHICLES

Commissioner for Patents P.O. Box 1450 Alexandría, VA 22313-1450

DECLARATION AND ASSIGNMENT BY INVENTOR UNDER RULE 37 C.F.R. § 1.63

I, Koichiro Kanda, of San Jose, California USA, hereby declare that:

I believe I am the sole original inventor or an original joint inventor of a claimed invention in a patent application entitled:

DETECTION OF UNSAFE CABIN CONDITIONS IN AUTONOMOUS VEHICLES

which is attached hereto and identified as Attorney Docket No. 112432-8012.US00

I believe the following persons are original joint inventors of the above-identified patent application(s):

Rocky Chau-Hsiung Lin, of Cupertino, California USA; and Thomas Yamasaki, of Anaheim Hills, California USA.

The above-identified application was made or authorized to be made by me.

I have reviewed and understand the contents of the above-identified patent application including the claims.

I am aware of the duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR §1.56.

Inventor : Rocky Chau-Hsiung LIN

Appl. No.: 16/657,575 Filed: October 18, 2019

Page : 2 of 3

I hereby acknowledge that any willful false statement made in the above declaration is punishable under 18 USC §1001 by fine or imprisonment of not more than five (5) years, or both.

ASSIGNMENT

I hereby assign to Alpine Electronics of Silicon Valley, Inc., a corporation of California, having a place of business at 3151 Jav Street, Suite 101, Santa Clara, California, 95054, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in any and all inventions and improvements which are described in an application for United States Patent, entitled DETECTION OF UNSAFE

CABIN CONDITIONS IN AUTONOMOUS VEHICLES, filed on October 18, 2019, and assigned U.S. Application Number 16/657,575. I authorize and request an attorney appointed in said application to hereafter insert above the filing date and application number of said application when known.

This assignment includes the entire right, title and interest in said application(s), all legal equivalents thereof in any country, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions and improvements, including, but not limited to, all divisions, continuations, reissues, reexamination certificates, any and all certificates issued in any post-grant proceeding, and extensions of said application(s) and patents of the United States, foreign patents, utility models, and design registrations, and the right to claim priority based on the filing date of said application(s) under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes, and the right to seek relief and recover all damages, including, but not limited to, a reasonable royalty, by reason of infringement or any other violation of patent or patent application rights. I authorize the Assignee to apply in all countries in my name or in the name of the Assignee for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements.

In addition, I hereby confirm the sale, assignment, and transfer to the Assignee of the entire right, title and interest throughout the world in said inventions and improvements by operation of an employment agreement between me and the Assignee existing at the time said inventions and improvements were made. Should I have any remaining interest, I hereby sell, assign, and transfer to the Assignee any right, title and interest I may have in said inventions and improvements anywhere in the world.

The foregoing assignments, sale and transfer have been made for good and valuable consideration, the receipt of which is hereby acknowledged.

Inventor : Rocky Chau-Hsiung LIN

Appl. No.: 16/657,575 Filed: October 18, 2019

Page : 3 of 3

I hereby represent and covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with the assignment of said inventions and improvements to the Assignee.

I further covenant for myself and my respective heirs, legal representatives and assigns, to assist the Assignee in handling various procedures, tasks and documentation in connection with this assignment, including, but not limited to, providing to the Assignee promptly upon the request of the Assignee all pertinent facts and documents relating to said invention and improvements, and said patents, said legal equivalents or other legal instrument as may be known and accessible to me and testifying as to the same in any interference, litigation, or proceeding relating thereto, and promptly executing and delivering to the Assignee or its legal representative any and all papers, documents, instruments or affidavits in connection with obtaining, maintaining, issuing or enforcing said application(s), said inventions and improvements, and said patents, said equivalents and other legal instrument which may be necessary or desirable to carry out the purposes thereof.

I am competent to execute the above declaration and assignment. I hereby have duly executed the declaration and assignment below with my name.

Full name of inventor: Kajchiro Kanda

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Perkins Coie LLP P.O. Box 1247

Seattle, Washington 98111-1247

Telephone: (858) 720-5700 Facsimile: (206) 359-7198

Docket No. 112432-8012.US00 (PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Applicant(s): Alpine Electronics of Silicon Valley, Inc.

Inventor(s): Rocky Chau-Hsiung LIN

Application No.: 16/657,575

Filing Date: October 18, 2019

Title: DETECTION OF UNSAFE CABIN

CONDITIONS IN AUTONOMOUS

VEHICLES

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

DECLARATION AND ASSIGNMENT BY INVENTOR UNDER RULE 37 C.F.R. § 1.63

I, Rocky Chau-Hsiung Lin, of Cupertino, California USA, hereby declare that:

I believe I am the sole original inventor or an original joint inventor of a claimed invention in a patent application entitled:

DETECTION OF UNSAFE CABIN CONDITIONS IN AUTONOMOUS VEHICLES

which is attached hereto and identified as Attorney Docket No. 112432-8012.US00

I believe the following persons are original joint inventors of the above-identified patent application(s):

Thomas Yamasaki, of Anaheim Hills, California USA; and Koichiro Kanda, of San Jose, California USA.

The above-identified application was made or authorized to be made by me.

I have reviewed and understand the contents of the above-identified patent application including the claims.

I am aware of the duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR §1.56.

Inventor: Rocky Chau-Haiung LIN Appl. No.: 16/657,575 Filed: October 18, 2019

Page : 2 of 3

I hereby acknowledge that any willful false statement made in the above declaration is punishable under 18 USC §1001 by fine or imprisonment of not more than five (5) years, or both.

ASSIGNMENT

I hereby assign to Alpine Electronics of Silicon Valley, Inc., a corporation of California, having a place of business at 3151 Jay Street, Suite 101, Santa Clara, California, 95054, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in any and all inventions and improvements which are described in an application for United States Patent, entitled **DETECTION OF UNSAFE** CABIN CONDITIONS IN AUTONOMOUS VEHICLES, filed on October 18, 2019, and assigned U.S. Application Number __16/657,575 _____. I authorize and request an attorney appointed in said application to hereafter insert above the filing date and application number of said application when known.

This assignment includes the entire right, title and interest in said application(s), all legal equivalents thereof in any country, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions and improvements, including, but not limited to, all divisions, continuations, reissues, reexamination certificates, any and all certificates issued in any post-grant proceeding, and extensions of said application(s) and patents of the United States, foreign patents, utility models, and design registrations, and the right to claim priority based on the filing date of said application(s) under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes, and the right to seek relief and recover all damages, including, but not limited to, a reasonable royalty, by reason of infringement or any other violation of patent or patent application rights. I authorize the Assignee to apply in all countries in my name or in the name of the Assignee for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements.

In addition, I hereby confirm the sale, assignment, and transfer to the Assignee of the entire right, title and interest throughout the world in said inventions and improvements by operation of an employment agreement between me and the Assignee existing at the time said inventions and improvements were made. Should I have any remaining interest, I hereby sell, assign, and transfer to the Assignce any right, title and interest I may have in said inventions and improvements anywhere in the world.

The foregoing assignments, sale and transfer have been made for good and valuable consideration, the receipt of which is hereby acknowledged.

Inventor : Rocky Chau-Hsiung LIN

Appl. No.: 16/657,575 Filed: October 18, 2019

Page : 3 of 3

I hereby represent and covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with the assignment of said inventions and improvements to the Assignee.

I further covenant for myself and my respective heirs, legal representatives and assigns, to assist the Assignee in handling various procedures, tasks and documentation in connection with this assignment, including, but not limited to, providing to the Assignee promptly upon the request of the Assignee all pertinent facts and documents relating to said invention and improvements, and said patents, said legal equivalents or other legal instrument as may be known and accessible to me and testifying as to the same in any interference, litigation, or proceeding relating thereto, and promptly executing and delivering to the Assignee or its legal representative any and all papers, documents, instruments or affidavits in connection with obtaining, maintaining, issuing or enforcing said application(s), said inventions and improvements, and said patents, said equivalents and other legal instrument which may be necessary or desirable to carry out the purposes thereof.

I am competent to execute the above declaration and assignment. I hereby have duly executed the declaration and assignment below with my name.

Full name of inventor: Rocky Chau-Hsiung Lin

	Inventor's signature
	Date: 10/10/2019
	The Assignee hereby acknowledges the assignment. The undersigned is authorized to act
on beh	alf of the Assignee.
	Assignee: ALPINE CLECTIONICS of SILICAN VALCEY INC
	Authorized officer's legal name: THOHAS M. YAWASAK I
	Authorized officer's title: PKE PEZ
	Authorized officer's signature: Jour Po
	Date: 10/10/2019

Perkins Coie LLP P.O. Box 1247

Seattle, Washington 98111-1247

Telephone: (858) 720-5700 Facsimile: (206) 359-7198

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Applicant(s): Alpine Electronics of Silicon Valley, Inc.

Inventor(s): Rocky Chau-Hsiung LIN

Application No.: 16/657,575

Filing Date: October 18, 2019

Title: DETECTION OF UNSAFE CABIN

CONDITIONS IN AUTONOMOUS

VEHICLES

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

DECLARATION AND ASSIGNMENT BY INVENTOR UNDER RULE 37 C.F.R. § 1.63

I, Thomas Yamasaki, of Anaheim Hills, California USA, hereby declare that:

I believe I am the sole original inventor or an original joint inventor of a claimed invention in a patent application entitled:

DETECTION OF UNSAFE CABIN CONDITIONS IN AUTONOMOUS VEHICLES

which is attached hereto and identified as Attorney Docket No. 112432-8012.US00

I believe the following persons are original joint inventors of the above-identified patent application(s):

Rocky Chau-Hsiung Lin, of Cupertine, California USA; and Koichiro Kanda, of San Jose, California USA.

The above-identified application was made or authorized to be made by me.

I have reviewed and understand the contents of the above-identified patent application including the claims.

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Inventor : Rocky Chau-Hsiung LIN

Appl. No.: 16/657,575 Filed: October 18, 2019

Page : 2 of 3

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Inventor : Rocky Chau-Hsiung LIN Docket No. 112432-8012.US00

Appl. No. : 16/657,575 Filed : October 18, 2019

Page : 3 of 3

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I am competent to execute the above declaration and assignment. I hereby have duly executed the declaration and assignment below with my name.

Full name of inventor, Thomas Yamasaki
Inventor's signature:
Date: 69 02TOBER 2/19

The Assignee hereby acknowledges the assignment. The undersigned is authorized to act on behalf of the Assignee.

Assignee: ALPIUL EGERMONICS OF SICICOU VALCO	1 / Comme
Authorized officer's legal name: TROMAS M. MATAME (•
Authorized officer's title: PASTRECT	•
Authorized officer's signature:	. .
Date: 14 Oc70561 2019	

Perkins Coie LLP P.O. Box 1247 Seattle, Washington 98111-1247 Telephone: (858) 720-5700 Facsimile: (206) 359-7198

112432-8012.0890/145792016.1