

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5746395

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	HIROMASA SATOH	09/17/2019
	TOSHIHIRO OBIKA	09/20/2019
	YUSUKE KOGA	09/19/2019
	YASUSHI AOKI	09/19/2019
	HIROMITSU TOYOTA	09/19/2019
	HARUO KOTERA	09/19/2019
	TATSUYA YAMASAKI	09/16/2019
	YUI MASUDA	09/16/2019
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	NISSIN KOGYO CO., LTD.	
<b>Street Address:</b>	801, KAZAWA	
<b>City:</b>	TOMI-CITY, NAGANO	
<b>State/Country:</b>	JAPAN	
<b>Postal Code:</b>	3890514	
<b>Name:</b>	VEONEER NISSIN BRAKE SYSTEMS JAPAN CO., LTD.	
<b>Street Address:</b>	3-17-6 SHINYOKOHAMA, KOHOKU-KU	
<b>City:</b>	YOKOHAMA-SHI, KANAGAWA	
<b>State/Country:</b>	JAPAN	
<b>Postal Code:</b>	2228580	
<b>Name:</b>	MITSUBISHI JIDOSHA KOGYO KABUSHIKI KAISHA	
<b>Street Address:</b>	1-21, SHIBAURA 3-CHOME, MINATO-KU	
<b>City:</b>	TOKYO	
<b>State/Country:</b>	JAPAN	
<b>Postal Code:</b>	1088410	
<b>Name:</b>	NTN CORPORATION	
<b>Street Address:</b>	3-17, KYOMACHIBORI 1-CHOME, NISHI-KU	
<b>City:</b>	OSAKA-SHI, OSAKA	
<b>State/Country:</b>	JAPAN	
<b>Postal Code:</b>	5500003	

**PROPERTY NUMBERS Total: 1**

<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16499146

**CORRESPONDENCE DATA**

**Fax Number:** (703)205-8050

*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:** 703-205-8000

**Email:** Spencer.Garth@bskb.com, Mailroom@BSKB.com

**Correspondent Name:** BIRCH, STEWART, KOLASCH & BIRCH, LLP

**Address Line 1:** 8110 GATEHOUSE ROAD

**Address Line 2:** SUITE 100E

**Address Line 4:** FALLS CHURCH, VIRGINIA 22042

<b>ATTORNEY DOCKET NUMBER:</b>	7058-0104PUS1
<b>NAME OF SUBMITTER:</b>	SPENCER GARTH
<b>SIGNATURE:</b>	/spencer garth/
<b>DATE SIGNED:</b>	09/30/2019

**Total Attachments: 12**

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US Application No. 16/499,146  
Filed on September 27, 2019

Attorney Docket No. 7058-0104PUS1

BIRCH, STEWART, KOLASCH & BIRCH, LLP  
8110 Gatehouse Road, Suite 100 East, Falls Church, Virginia 22042-1248  
Telephone: (703) 205-8000 • Facsimile: (703) 205-8050 • Email: mailroom@bskb.com

**DECLARATION AND ASSIGNMENT  
FOR PATENT AND DESIGN APPLICATIONS**

UNITED STATES PATENT RIGHTS, OR  
UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS  
(MULTIPLE ASSIGNERS)

Title of Invention ⇨ VEHICLE BRAKE SYSTEM

As a below named inventor (hereinafter designated as the undersigned), I hereby declare that:

This declaration is directed to the application attached hereto.

Application not Attached ⇨ If the application is not attached hereto, the application is as identified by the attorney docket number as set forth above and/or the following:

Enter Appl. No. ⇨ United States Application Number or PCT International Appl. No. FCT/JP2018/013435

Enter Filing Date ⇨ filed on March 29, 2018

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

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

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

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations § 1.56.

WHEREAS, the undersigned has invented certain new and useful improvements described in the application identified.

Insert Names of Assignees ⇨ WHEREAS, [1] NISSIN KOGYO CO., LTD.; and [2] VEONEER NISSIN BRAKE SYSTEMS JAPAN CO., LTD.; and [3] MITSUBISHI JIDOSHA KOGYO KABUSHIKI KAISHA; and [4] NTN CORPORATION (hereinafter designated as Assignees)

Insert Addresses of Assignees ⇨ of 801, Kazawa, Tomi-city, Nagano 3890514, Japan; and 3-17-6 Shinyokohama, Kohoku-ku, Yokohama-shi, Kanagawa 2228580, Japan; and 1-21, Shiba-ura 3-chome, Minato-ku, Tokyo 1088410, Japan; and 3-17, Kyomachibori 1-chome, Nishi-ku, Osaka-shi, Osaka 5500003, Japan, respectively,

their heirs, successors, legal representatives and assigns are desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America and

Check Box if Appropriate ⇨  in any foreign countries.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the undersigned has (have) sold, assigned and transferred, and by these presents does (do) sell, assign and transfer unto said Assignees the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries; including all rights under the International Convention for the Protection of Industrial Property or similar agreements as well as the right to claim benefit from the priority of the above-mentioned application; and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or terms for which the same may be granted

in equal undivided amounts unless specific undivided amounts are listed below:

Ownership Interest <sup>2</sup> Assignee 1 (1/6); Assignee 2 (1/6); Assignee 3 (1/3) Assignee 4 (1/3).

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignees may deem necessary or expedient.

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The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of (a) valid United States of America patent(s) or a grant of (a) valid United States of America and any foreign patent(s) to the Assignees and to vest all rights therein hereby conveyed to said Assignees as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patent(s) resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignees, as Assignees of the entire interest, and hereby covenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

The undersigned hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

The undersigned hereby acknowledges that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

LEGAL NAME OF INVENTOR

Inventor's Name <sup>2</sup> Inventor: Hiromasa SATOH Date: 2019.9.17  
Inventor's Signature <sup>2</sup> Signature: Hiromasa Satoh

An application data sheet (FTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use a separate form for each inventor; or check the box below and complete the attached page(s) to list additional inventors.  
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Attorney Docket No. 7058-0104PUS1

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Inventor's Name      ➤ Inventor: Hiromasa SATOH      Date: \_\_\_\_\_

Inventor's Signature      ➤ Signature: \_\_\_\_\_

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**SUPPLEMENTAL SHEET FOR  
DECLARATION AND ASSIGNMENT**

**ADDITIONAL INVENTOR(S)**  
Supplemental Sheet Page 1 of 1

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name ◊ Inventor: Toshihiro OBIKA Date: 19 Sep 20

Inventor's Signature ◊ Signature: Toshihiro Obika

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name ◊ Inventor: Yusuke KOGA Date: September 19, 2019

Inventor's Signature ◊ Signature: Yusuke Koga

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name ◊ Inventor: Yasushi AOKI Date: Sep 19 2019

Inventor's Signature ◊ Signature: Yasushi Aoki

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name ◊ Inventor: Hiroimitsu TOYOTA Date: \_\_\_\_\_

Inventor's Signature ◊ Signature: \_\_\_\_\_

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name ◊ Inventor: Haruo KOTERA Date: \_\_\_\_\_

Inventor's Signature ◊ Signature: \_\_\_\_\_

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name ◊ Inventor: Tatsuya YAMASAKI Date: \_\_\_\_\_

Inventor's Signature ◊ Signature: \_\_\_\_\_

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name ◊ Inventor: Yui MASUDA Date: \_\_\_\_\_

Inventor's Signature ◊ Signature: \_\_\_\_\_



Attorney Docket No. 7058-0104PUS1

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LEGAL NAME OF INVENTOR

Inventor's Name      ⇒ Inventor: Hiromasa SATOH      Date: \_\_\_\_\_

Inventor's Signature      ⇒ Signature: \_\_\_\_\_

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Inventor's Name ⇨ Inventor: Toshihiro OBIKA Date: \_\_\_\_\_

Inventor's Signature ⇨ Signature: \_\_\_\_\_

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Inventor's Name ⇨ Inventor: Yusuke KOGA Date: \_\_\_\_\_

Inventor's Signature ⇨ Signature: \_\_\_\_\_

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Inventor's Name ⇨ Inventor: Yasushi AOKI Date: \_\_\_\_\_

Inventor's Signature ⇨ Signature: \_\_\_\_\_

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name ⇨ Inventor: Hiromitsu TOYOTA Date: Sep/19/2019  
19th. Sep. 2019

Inventor's Signature ⇨ Signature: Hiromitsu TOYOTA

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name ⇨ Inventor: Haruo KOTERA Date: Sep 19/2019  
(19th. Sep. 2019)

Inventor's Signature ⇨ Signature: Haruo KOTERA

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Inventor's Name ⇨ Inventor: Tatsuya YAMASAKI Date: \_\_\_\_\_

Inventor's Signature ⇨ Signature: \_\_\_\_\_

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name ⇨ Inventor: Yui MASUDA Date: \_\_\_\_\_

Inventor's Signature ⇨ Signature: \_\_\_\_\_

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in equal undivided amounts unless specific undivided amounts are listed below:

Ownership Interest      \* Assignee 1 (1/6); Assignee 2 (1/6); Assignee 3 (1/3) Assignee 4 (1/3).

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignees may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letters Patent(s) or reissue patent issued thereon and to cooperate with the Assignees in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of (a) valid United States of America patent(s) or a grant of (a) valid United States of America and any foreign patent(s) to the Assignees and to vest all rights therein hereby conveyed to said Assignees as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patent(s) resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignees, as Assignees of the entire interest, and hereby covenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

The undersigned hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

The undersigned hereby acknowledges that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

LEGAL NAME OF INVENTOR

Inventor's Name      \* Inventor: Hiromasa SATOH      Date: \_\_\_\_\_

Inventor's Signature      \* Signature: \_\_\_\_\_

An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use a separate form for each inventor; or check the box below and complete the attached page(s) to list additional inventors.

Additional inventors are being named on the 1 supplemental sheet(s) attached hereto.

SUPPLEMENTAL SHEET FOR  
DECLARATION AND ASSIGNMENT

ADDITIONAL INVENTOR(S)  
Supplemental Sheet Page 1 of 1

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name ⇨ Inventor: Toshihiro OBIKA Date: \_\_\_\_\_

Inventor's Signature ⇨ Signature: \_\_\_\_\_

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name ⇨ Inventor: Yusuke KOGA Date: \_\_\_\_\_

Inventor's Signature ⇨ Signature: \_\_\_\_\_

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name ⇨ Inventor: Yasushi AOKI Date: \_\_\_\_\_

Inventor's Signature ⇨ Signature: \_\_\_\_\_

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name ⇨ Inventor: Hironitsu TOYOTA Date: \_\_\_\_\_

Inventor's Signature ⇨ Signature: \_\_\_\_\_

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name ⇨ Inventor: Haruo KOTERA Date: \_\_\_\_\_

Inventor's Signature ⇨ Signature: \_\_\_\_\_

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name ⇨ Inventor: Tatsuya YAMASAKI Date: Sep. 16, 2019

Inventor's Signature ⇨ Signature: Tatsuya Yamasaki

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name ⇨ Inventor: Yui MASUDA Date: Sep 16, 2019

Inventor's Signature ⇨ Signature: Yui Masuda