PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5781788

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Noboru TAKAGI	09/25/2019
Hirokazu KATO	09/25/2019
Rihito KANEKO	09/26/2019
Naoto HISAMINATO	09/26/2019
Hirokazu ANDO	09/25/2019
Masaaki YAMAGUCHI	09/28/2019
Hirotaka WATANABE	09/27/2019
Takahiko AOYAGI	09/26/2019
Masahiro YOSHIDA	09/27/2019
Koji NUNAMI	09/30/2019
Naoto YUMISASHI	09/30/2019
Masafumi YOSHIDA	09/30/2019

RECEIVING PARTY DATA

Name:	TOYOTA JIDOSHA KABUSHIKI KAISHA	
Street Address:	1, Toyota-cho	
City:	Toyota-shi, Aichi-ken	
State/Country:	Japan	
Postal Code:	471-8571	
Namai	ALCINI CEUZI IZADI ICI IUZI IZAICHA	
Name:	AISIN SEIKI KABUSHIKI KAISHA	
Street Address:	1, Asahi-machi 2-chome	
Street Address:	1, Asahi-machi 2-chome	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16660146

CORRESPONDENCE DATA

Fax Number: (703)836-2787

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

PATENT

505734974 REEL: 050791 FRAME: 0448

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 703-836-6400
Email: email@oliff.com
Correspondent Name: JAMES A. OLIFF

Address Line 1: OLIFF PLC

Address Line 2: P.O. BOX 320850

Address Line 4: ALEXANDRIA, VIRGINIA 22320-4850

ATTORNEY DOCKET NUMBER: 188857

NAME OF SUBMITTER: KEIVONA D. GRAY

SIGNATURE: /KeiVona D. Gray/

DATE SIGNED: 10/22/2019

Total Attachments: 4

source=6971940_1#page1.tif source=6971940_1#page2.tif source=6971940_1#page3.tif source=6971940_1#page4.tif

> PATENT REEL: 050791 FRAME: 0449

ASSIGNMENT OF APPLICATION

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned inventor(s) hereby:

- 1) Sell(s), assign(s) and transfer(s) jointly to
- 1. TOYOTA JIDOSHA KABUSHIKI KAISHA which has a business office at
- 1, Toyota-cho, Toyota-shi, Aichi-ken 471-8571 Japan,
- 2. AISIN SEIKI KABUSHIKI KAISHA which has a business office at
- 1, Asahi-machi 2-chome, Kariya-shi, Aichi-ken 448-8650 Japan

(hereinafter referred to as "ASSIGNEES"), the entire right, title, and interest in any and all inventions and improvements disclosed in, application(s) based upon, and Patent(s) granted upon the information which is disclosed in the application entitled:

COOLING APPARATUS FOR INTERNAL COMBUSTION ENGINE

for which I(we)	have executed	an application	for	a United States
Letters Patent	on <u>September 25</u>	, 26 and 28, 2019		(Application Serial
No. <u>16/660.146</u>	filed on	October 22, 2019		

- 2) Authorize and request the Commissioner of Patents to issue any and all Letters Patents resulting from said application, or any division, continuation, substitute or reissue thereof, to the ASSIGNEES.
- 3) Agree to execute all papers and documents and perform any acts which are reasonably necessary in connection with the prosecution of said application, as well as any derivative applications thereof and/or the enforcement of patents resulting from such applications.

Signed on the date(s) indicated beside my (our) signature(s).

1) Mosow Takagi Date: September 25, 2019

2) Hindazu Kato Date: September 25, 2019

Name: Hirokazu KATO

3) Date: September 25, 2019

Name: Rihito KANEKO Date: September 26, 2019

4) Rinda Kaneko Navto Hirominato September 26 2019

Name: Naoto HISAMINATO Date: September 25, 2019

5) Wirokazu Ando Date: September 25, 2019

Name: Hirokazu Ando Date: September 25, 2019

6) Magaala Jamagadi Date: September 25, 2019

Name: Masaaki KAMAGGCHI

Date: September 25, 2019

Name: Hirotaka WATANABE	Date:
8) Jakahika Cayagi Name: Takahiko AOYAGI	Date: September 26 2019
9) Name: Masahiro YOSHIDA	Date:
10)Name: Koji NUNAMI	Date:
11)	Date:
12) Name: Masafumi YOSHIDA	Date:
Witness: Masara Muramatsu	Date: September 30,2019
Witness.	Data

ASSIGNMENT OF APPLICATION

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned inventor(s) hereby:

- 1) Sell(s), assign(s) and transfer(s) jointly to
- 1. TOYOTA JIDOSHA KABUSHIKI KAISHA which has a business office at
- 1, Toyota-cho, Toyota-shi, Aichi-ken 471-8571 Japan,
- 2. AISIN SEIKI KABUSHIKI KAISHA which has a business office at
- 1, Asahi-machi 2-chome, Kariya-shi, Aichi-ken 448-8650 Japan

(hereinafter referred to as "ASSIGNEES"), the entire right, title, and interest in any and all inventions and improvements disclosed in, application(s) based upon, and Patent(s) granted upon the information which is disclosed in the application entitled:

COOLING APPARATUS FOR INTERNAL COMBUSTION ENGINE

for	whic	ch I(we)	have	execut	ed an	appl	ication	n for	a	United	Stat	ces
		Patent					2212			Applicat		
No.	16/6	560,146	fil	ed on _	Octo	ber 22	2019)				

- 2) Authorize and request the Commissioner of Patents to issue any and all Letters Patents resulting from said application, or any division, continuation, substitute or reissue thereof, to the ASSIGNEES.
- 3) Agree to execute all papers and documents and perform any acts which are reasonably necessary in connection with the prosecution of said application, as well as any derivative applications thereof and/or the enforcement of patents resulting from such applications.

Signed on the date(s) indicated beside my(our) signature(s).

1)Nar	me: Noboru TAKAGI	Date:
2)	me: Hirokazu KATO	Date:
3) <u>Nar</u>	me: Rihito KANEKO	Date:
′ 	me: Naoto HISAMINATO	Date:
	me: Hirokazu ANDO	Date:
6)	me: Masaaki YAMAGUCHI	Date:

PATENT REEL: 050791 FRAME: 0452

201805860US00, AI-P20180189US01 P1P20180583US

7) Wiotaka Watanalee Name: Hirotaka WATANABE	Date: September 21,2018
8) Name: Takahiko AOYAGI	Date:
9) Masahiro Yoshida Name: Masahiro YOSHIDA	Date: September 27-20/9
10) Koujú Vumami Name: koji NUNAMI	Date: September 30,2019
11) Maoto Yumisashi Name: Naoto YUMISASHI	Date: September 30, 2019
12) Masafumi Yoshida Name: Masafumi YOSHIDA	Date: September 30, 2019
Witness:	Date:
Witness:	Date: October 1, 2019

PATENT REEL: 050791 FRAME: 0453