

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT7373641

| | |
|---|---------------------------------------|
| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT |
| CONVEYING PARTY DATA | |
| Name | Execution Date |
| DR. DAVID GONZALEZ GONZALEZ | 04/08/2022 |
| DR. ANDREAS ANDRAE | 04/07/2022 |
| DR. OSVALDO GONSA | 06/08/2022 |
| HIROKI IIMORI | 04/09/2022 |
| PROF GIUSEPPE THADEU FREITAS DE ABREU | 04/08/2022 |
| RECEIVING PARTY DATA | |
| Name: | CONTINENTAL AUTOMOTIVE GMBH |
| Street Address: | VAHRENWALDER STRASSE 9 |
| City: | HANNOVER |
| State/Country: | GERMANY |
| Postal Code: | 30165 |
| PROPERTY NUMBERS Total: 1 | |
| Property Type | Number |
| Application Number: | 17772781 |
| CORRESPONDENCE DATA | |
| Fax Number: | (847)862-8308 |
| <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: | 8478620021 |
| Email: | patentsus@continental-corporation.com |
| Correspondent Name: | CONTINENTAL AUTOMOTIVE SYSTEMS, INC. |
| Address Line 1: | 21440 W LAKE COOK RD |
| Address Line 2: | INTELLECTUAL PROPERTY |
| Address Line 4: | DEER PARK, ILLINOIS 60010-3609 |
| ATTORNEY DOCKET NUMBER: | 2019P04477WOUS-CP |
| NAME OF SUBMITTER: | ROBERT K SMOLIK |
| SIGNATURE: | /Robert K Smolik/ |
| DATE SIGNED: | 06/09/2022 |
| Total Attachments: 14 | |

source=Assignment#page1.tif
source=Assignment#page2.tif
source=Assignment#page3.tif
source=Assignment#page4.tif
source=Assignment#page5.tif
source=Assignment#page6.tif
source=Assignment#page7.tif
source=Assignment#page8.tif
source=Assignment#page9.tif
source=Assignment#page10.tif
source=Assignment#page11.tif
source=Assignment#page12.tif
source=Assignment#page13.tif
source=Assignment#page14.tif

A S S I G N M E N T

For good and valuable consideration, I/we, the undersigned

Dr.David Gonzalez Gonzalez
residing at:
63329 Egelsbach

GERMANY

Dr.Andreas Andrae
residing at:
60433 Frankfurt am Main

GERMANY

Dr.Osvaldo Gonsa
residing at:
60438 Frankfurt am Main

GERMANY

Hiroki limori
residing at:
28757 Bremen

GERMANY

Prof.Giuseppe Thadeu Freitas de Abreu
residing at:
28757 Bremen

GERMANY

hereby sell, assign, and transfer to

| |
|---|
| Continental Automotive GmbH |
| a German corporation |
| organized and existing under the laws of GERMANY |
| having its (their) principal place of business in Hannover; GERMANY |

herein the "Assignee(s)", its (their) successor(s), assigns and legal representatives the entire and exclusive right, title and interest in and for the United States and for any of the Contracting States bound by the PCT on the international filing date, in all and to any improvements in the

(Title:) **METHOD OF ESTIMATING TRANSMIT SYMBOL VECTORS IN AN OVERLOADED COMMUNICATION CHANNEL**

disclosed in the PCT international application for Letters Patent designating the United States and any of the Contracting States bound by the PCT on the international filing date, said application being identified in our records as

Applicants File No. 2019P04477WOUS
and filed as PCT-application PCT/EP2019/079532

and in and to said application and all divisional, continuing substitute, renewal, reissue and all other applications for Letters Patent which have been or shall be filed in the United States and any of the Contracting States bound by the PCT on the international filing date on any of said

IDNR: 4248 / 06.06.2007

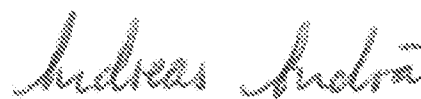
improvements; and in and to all original and reissued patents which have been or shall be issued in the United States and any of the Contracting States bound by the PCT on the international filing date on said improvements;

hereby agree that said Assignee(s) may apply for and receive Letters Patent for said improvements in its (their) own name and that when requested without charge to but at the expense of said Assignee(s), its (their) successor(s), assigns, and legal representatives, to carry out in good faith the intent and purpose of this agreement, the undersigned will execute all divisional, continuing substitute, renewal, reissue and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee(s), its (their) successor(s), assigns and legal representatives all facts known to the undersigned relating to said improvements and the history thereof; and generally do everything possible which said Assignee(s), its (their) successor(s), assigns, or legal representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for patents and all patents on said improvements in said Assignee(s), its (their) successor(s), assigns, and legal representatives; and hereby covenant with said Assignee(s), its (their) successor(s), assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed had been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Date: _____

Dr.David Gonzalez Gonzalez

Date: 07.04.2022



Dr.Andreas Andrae

Date: _____

Dr.Osvaldo Gonsa

Date: _____

Hiroki Imori

Date: _____

Prof. Giuseppe Thadeu Freitas de Abreu

ASSIGNMENT

For good and valuable consideration, I/we, the undersigned

Dr.David Gonzalez Gonzalez
residing at:
63329 Egelsbach

GERMANY

Dr.Andreas Andrae
residing at:
60433 Frankfurt am Main

GERMANY

Dr.Osvaldo Gonsa
residing at:
60438 Frankfurt am Main

GERMANY

Hiroki Iimori
residing at:
28757 Bremen

GERMANY

Prof.Giuseppe Thadeu Freitas de Abreu
residing at:
28757 Bremen

GERMANY

hereby sell, assign, and transfer to

| |
|---|
| Continental Automotive GmbH |
| a German corporation |
| organized and existing under the laws of GERMANY |
| having its (their) principal place of business in Hannover, GERMANY |

herein the "Assignee(s)", its (their) successor(s), assigns and legal representatives the entire and exclusive right, title and interest in and for the United States and for any of the Contracting States bound by the PCT on the international filing date, in all and to any improvements in the

(Title:) **METHOD OF ESTIMATING TRANSMIT SYMBOL VECTORS IN AN OVERLOADED COMMUNICATION CHANNEL**

disclosed in the PCT international application for Letters Patent designating the United States and any of the Contracting States bound by the PCT on the international filing date, said application being identified in our records as

Applicants File No. 2019P04477WOUS
and filed as PCT-application PCT/EP2019/079532

and in and to said application and all divisional, continuing substitute, renewal, reissue and all other applications for Letters Patent which have been or shall be filed in the United States and any of the Contracting States bound by the PCT on the international filing date on any of said

IDNR: 4248 / 06.03.2007


PATENT

REEL: 060147 FRAME: 0006

improvements; and in and to all original and reissued patents which have been or shall be issued in the United States and any of the Contracting States bound by the PCT on the international filing date on said improvements;

hereby agree that said Assignee(s) may apply for and receive Letters Patent for said improvements in its (their) own name and that when requested without charge to but at the expense of said Assignee(s), its (their) successor(s), assigns, and legal representatives, to carry out in good faith the intent and purpose of this agreement, the undersigned will execute all divisional, continuing substitute, renewal, reissue and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee(s), its (their) successor(s), assigns and legal representatives all facts known to the undersigned relating to said improvements and the history thereof; and generally do everything possible which said Assignee(s), its (their) successor(s), assigns, or legal representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for patents and all patents on said improvements in said Assignee(s), its (their) successor(s), assigns, and legal representatives; and hereby covenant with said Assignee(s), its (their) successor(s), assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed had been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Date: 08/04/2022



Dr. David Gonzalez Gonzalez

Date: _____

Dr. Andreas Andrae

Date: _____

Dr. Osvaldo Gonsa

A S S I G N M E N T

For good and valuable consideration, I/we, the undersigned

Dr.David Gonzalez Gonzalez
residing at:
63329 Egelsbach

GERMANY

Dr.Andreas Andrae
residing at:
60433 Frankfurt am Main

GERMANY

Dr.Osvaldo Gonsa
residing at:
60438 Frankfurt am Main

GERMANY

Hiroki Iimori
residing at:
28757 Bremen *2270067 Yokohama*

~~**GERMANY**~~

Japan 09.09.2022, 2c

Prof.Giuseppe Thadeu Freitas de Abreu
residing at:
28757 Bremen

GERMANY

hereby sell, assign, and transfer to

| |
|---|
| Continental Automotive GmbH |
| a German corporation |
| organized and existing under the laws of GERMANY |
| having its (their) principal place of business in Hannover, GERMANY |

herein the "Assignee(s)", its (their) successor(s), assigns and legal representatives the entire and exclusive right, title and interest in and for the United States and for any of the Contracting States bound by the PCT on the international filing date, in all and to any improvements in the

(Title:) **METHOD OF ESTIMATING TRANSMIT SYMBOL VECTORS IN AN OVERLOADED COMMUNICATION CHANNEL**

disclosed in the PCT international application for Letters Patent designating the United States and any of the Contracting States bound by the PCT on the international filing date, said application being identified in our records as

Applicants File No. 2019P04477WOUS
and filed as PCT-application PCT/EP2019/079532

and in and to said application and all divisional, continuing substitute, renewal, reissue and all other applications for Letters Patent which have been or shall be filed in the United States and any of the Contracting States bound by the PCT on the international filing date on any of said

IDNR: 4248 / 06.06.2007

improvements; and in and to all original and reissued patents which have been or shall be issued in the United States and any of the Contracting States bound by the PCT on the international filing date on said improvements;

hereby agree that said Assignee(s) may apply for and receive Letters Patent for said improvements in its (their) own name and that when requested without charge to but at the expense of said Assignee(s), its (their) successor(s), assigns, and legal representatives, to carry out in good faith the intent and purpose of this agreement, the undersigned will execute all divisional, continuing substitute, renewal, reissue and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee(s), its (their) successor(s), assigns and legal representatives all facts known to the undersigned relating to said improvements and the history thereof; and generally do everything possible which said Assignee(s), its (their) successor(s), assigns, or legal representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for patents and all patents on said improvements in said Assignee(s), its (their) successor(s), assigns, and legal representatives; and hereby covenant with said Assignee(s), its (their) successor(s), assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed had been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Date: _____

Dr.David Gonzalez Gonzalez


Date: _____

Dr.Andreas Andrae

Date: _____

Dr.Osvaldo Gonsa

Date: 09.08.2022


Hiroki Jimori

Date: _____

Prof. Giuseppe Thadeu Freitas de Abreu

A S S I G N M E N T

For good and valuable consideration, I/we, the undersigned

Dr.David Gonzalez Gonzalez
residing at:
63329 Egelsbach

GERMANY

Dr.Andreas Andrae
residing at:
60433 Frankfurt am Main

GERMANY

Dr.Osvaldo Gonsa
residing at:
60438 Frankfurt am Main

GERMANY

Hiroki Iimori
residing at:
28757 Bremen

GERMANY

Prof.Giuseppe Thadeu Freitas de Abreu
residing at:
28757 Bremen

GERMANY

hereby sell, assign, and transfer to

| |
|---|
| Continental Automotive GmbH |
| a German corporation |
| organized and existing under the laws of GERMANY |
| having its (their) principal place of business in Hannover; GERMANY |

herein the "Assignee(s)", its (their) successor(s), assigns and legal representatives the entire and exclusive right, title and interest in and for the United States and for any of the Contracting States bound by the PCT on the international filing date, in all and to any improvements in the

(Title:) **METHOD OF ESTIMATING TRANSMIT SYMBOL VECTORS IN AN OVERLOADED COMMUNICATION CHANNEL**

disclosed in the PCT international application for Letters Patent designating the United States and any of the Contracting States bound by the PCT on the international filing date, said application being identified in our records as

Applicants File No. 2019P04477WOUS
and filed as PCT-application PCT/EP2019/079532

and in and to said application and all divisional, continuing substitute, renewal, reissue and all other applications for Letters Patent which have been or shall be filed in the United States and any of the Contracting States bound by the PCT on the international filing date on any of said

IDNR: 4248 / 06.06.2007

improvements; and in and to all original and reissued patents which have been or shall be issued in the United States and any of the Contracting States bound by the PCT on the international filing date on said improvements;

hereby agree that said Assignee(s) may apply for and receive Letters Patent for said improvements in its (their) own name and that when requested without charge to but at the expense of said Assignee(s), its (their) successor(s), assigns, and legal representatives, to carry out in good faith the intent and purpose of this agreement, the undersigned will execute all divisional, continuing substitute, renewal, reissue and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee(s), its (their) successor(s), assigns and legal representatives all facts known to the undersigned relating to said improvements and the history thereof; and generally do everything possible which said Assignee(s), its (their) successor(s), assigns, or legal representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for patents and all patents on said improvements in said Assignee(s), its (their) successor(s), assigns, and legal representatives; and

hereby covenant with said Assignee(s), its (their) successor(s), assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed had been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Date: _____

Dr.David Gonzalez Gonzalez

Date: _____

Dr.Andreas Andrae

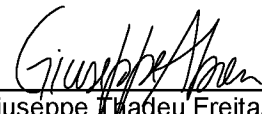
Date: _____

Dr.Osvaldo Gonsa

Date: _____

Hiroki Iimori

Date: 8.4.2022



Prof. Giuseppe Freitas de Abreu

A S S I G N M E N T

For good and valuable consideration, I/we, the undersigned

Dr.David Gonzalez Gonzalez
residing at:
63329 Egelsbach

GERMANY

Dr.Andreas Andrae
residing at:
60433 Frankfurt am Main

GERMANY

Dr.Osvaldo Gonsa
residing at:
60438 Frankfurt am Main

GERMANY

Hiroki limori
residing at:
28757 Bremen

GERMANY

Prof.Giuseppe Thadeu Freitas de Abreu
residing at:
28757 Bremen

GERMANY

hereby sell, assign, and transfer to

| |
|---|
| Continental Automotive GmbH |
| a German corporation |
| organized and existing under the laws of GERMANY |
| having its (their) principal place of business in Hannover; GERMANY |

herein the "Assignee(s)", its (their) successor(s), assigns and legal representatives the entire and exclusive right, title and interest in and for the United States and for any of the Contracting States bound by the PCT on the international filing date, in all and to any improvements in the

(Title:) **METHOD OF ESTIMATING TRANSMIT SYMBOL VECTORS IN AN OVERLOADED COMMUNICATION CHANNEL**

disclosed in the PCT international application for Letters Patent designating the United States and any of the Contracting States bound by the PCT on the international filing date, said application being identified in our records as

Applicants File No. 2019P04477WOUS
and filed as PCT-application PCT/EP2019/079532

and in and to said application and all divisional, continuing substitute, renewal, reissue and all other applications for Letters Patent which have been or shall be filed in the United States and any of the Contracting States bound by the PCT on the international filing date on any of said

IDNR: 4248 / 06.06.2007

improvements; and in and to all original and reissued patents which have been or shall be issued in the United States and any of the Contracting States bound by the PCT on the international filing date on said improvements;

hereby agree that said Assignee(s) may apply for and receive Letters Patent for said improvements in its (their) own name and that when requested without charge to but at the expense of said Assignee(s), its (their) successor(s), assigns, and legal representatives, to carry out in good faith the intent and purpose of this agreement, the undersigned will execute all divisional, continuing substitute, renewal, reissue and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee(s), its (their) successor(s), assigns and legal representatives all facts known to the undersigned relating to said improvements and the history thereof; and generally do everything possible which said Assignee(s), its (their) successor(s), assigns, or legal representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for patents and all patents on said improvements in said Assignee(s), its (their) successor(s), assigns, and legal representatives; and hereby covenant with said Assignee(s), its (their) successor(s), assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed had been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Date: _____

Dr.David Gonzalez Gonzalez

Date: _____

Dr.Andreas Andrae

Date: 08.06.2022



Dr.Osvaldo Gonsa

Date: _____

Hiroki Imori

Date: _____

Prof. Giuseppe Thadeu Freitas de Abreu
