PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-------------------|----------------|
| Kiyoshi KIMURA | 10/29/2012 |
| Jun YAMADA | 10/30/2012 |
| Masaaki SHINOJIMA | 10/29/2012 |

RECEIVING PARTY DATA

| Name: | DENSO CORPORATION |
|-----------------|--------------------------|
| Street Address: | 1-1, Showa-cho |
| City: | Kariya-city, Aichi-pref. |
| State/Country: | JAPAN |
| Postal Code: | 448-8661 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13714822 |

CORRESPONDENCE DATA

Fax Number: 7038164100

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 703-816-4000
Email: js@nixonvan.com
Correspondent Name: Michelle N. Lester

Address Line 1: NIXON & VANDERHYE, PC

Address Line 2: 901 NORTH GLEBE ROAD, 11TH FLOOR

Address Line 4: ARLINGTON, VIRGINIA 22203

| ATTORNEY DOCKET NUMBER: | MNL-2018-3032 |
|-------------------------|--------------------|
| NAME OF SUBMITTER: | Michelle N. Lester |

Total Attachments: 1

source=ASSIGNMENT#page1.tif

PATENT

REEL: 029470 FRAME: 0575

| Ca | se | No. | : | |
|----|----|------|----|----------|
| | 14 | 7664 | 1_ | US-RF-nk |

ASSIGNMENT OF U.S. PATENT APPLICATION

| (Inven | tors) Kiyosh | Kiyoshi Kimura | | | | |
|--------------|---------------------------------------|--|--|-----------------|--|--|
| | Jun Ya | | | | | |
| | Masaa | Masaaki Shinojima | | | | |
| | In cons | In consideration of the sum of one dollar (\$1.00) and other good and valuable | | | | |
| | | | gned, the undersigned agree(s) to ass | ign, and | | |
| | | sign, transfer and set over | to | | | |
| (Assig | | ORPORATION | a corporation of Japan | | | |
| (Addre | | o, Kariya-city, Aichi-pref., | | *** | | |
| | | | ne undersigned's entire right, title and | | | |
| | | | cies and possessions in the invention, | | | |
| (T:(1-) | | | ent which may be granted therefore, k | nown as | | |
| (Title) | | ROL APPARATUS | | | | |
| | nor which the Ur | idersigned has (nave) exec | tuted on even date herewith an applica | ation for | | |
| | patent in the Or | or has already file | f not on even date, then has executed d U.S. application Serial No, or | on | | |
| | | or has already life | u U.S. application Serial No, of | 11 | | |
| | The undersigne | ed acknowledges an obligat | ion of assignment of this invention to s | hies | | |
| | assignee at the | time the invention was ma | de | baid | | |
| TI | - | | | .:41- 41 | | |
| | | | documents necessary in connection was continuing or divisional applications | | | |
| | | | ch applications as the Assignee may d | | | |
| | | | may be necessary in connection with | | | |
| | | | dustrial Property or similar agreement | | | |
| | | | acts which may be necessary to obtain | | | |
| | d States patent to the A | | acts which may be necessary to obtain | i a giaill Oi a | | |
| | • | J | | | | |
| 1 offers Do | ne undersigned nereby | autnorize(s) and request(s) | the Commissioner of Patents to issue | any and all | | |
| continuition | tent of the United State | s resulting from said applic | ation or any division or divisions or col entire interest, and hereby covenants | ntinuing | | |
| | | | pned, and that he has (they have) not o | | | |
| | ecute, any agreement i | | gried, and that he has (they have) not | executed and | | |
| | | | ANAMPEDINE DO # | | | |
| | | | & VANDERHYE P.C. the power to ins | | | |
| | | | y or desirable in order to comply with t | | | |
| | | | It is understood and agreed that ASS SSIGNEE and will continue to represer | | | |
| | E with respect to this in | | SIGNEE and will continue to represer | it only | | |
| | • | | | | | |
| in | witness whereof, execu | uted by the undersigned on | the date(s) opposite the undersigned | signature(s). | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Date Oct | tober 29, 2012 | Signature of inventor | Kirjoshi Kimura | | | |
| | · · · · · · · · · · · · · · · · · · · | olginataro or involttor | Kiyoshi Kimura | | | |
| ar. | \ | | | | | |
| Date (S | ttober 30,2012 | Signature of inventor | Jun Yamada | | | |
| | | ~ √ | Jun Yamada | | | |
| Λ. | +0 - 20 2010 | | | | | |
| Date 6 | tober 29,2012 | Signature of inventor | masaaki Spinojim | ld | | |
| | | _ | Magazki Shinajima | | | |

264637

PATENT REEL: 029470 FRAME: 0576

RECORDED: 12/14/2012