502541168 10/22/2013

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2586610

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

CONVEYING PARTY DATA

| Name | Execution Date | |
|---------------|----------------|--|
| TATSUYA SENOO | 10/02/2013 | |

RECEIVING PARTY DATA

| Name: | FANUC CORPORATION | |
|-------------------|------------------------------------------|--|
| Street Address: | 3580, SHIBOKUSA AZA-KOMANBA, OSHINO-MURA | |
| Internal Address: | MINAMITSURU-GUN | |
| City: | YAMANASHI | |
| State/Country: | JAPAN | |
| Postal Code: | 401-0597 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number | |
|---------------------|----------|--|
| Application Number: | 14055045 | |

CORRESPONDENCE DATA

Fax Number: (612)492-7077 Phone: 612.492.7000

Email: dmaday@fredlaw.com

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

Correspondent Name: DEBORAH L. MADAY

Address Line 1: FREDRIKSON & BYRON, P.A.

Address Line 2: 200 SOUTH SIXTH STREET, SUITE 4000 Address Line 4: MINNEAPOLIS, MINNESOTA 55402-1425

| ATTORNEY DOCKET NUMBER: | 48623.119.1 |
|-------------------------|-------------------------|
| NAME OF SUBMITTER: | NATALIE D. KADIEVITCH |
| Signature: | /Natalie D. Kadievitch/ |
| Date: | 10/22/2013 |

Total Attachments: 1

source=48623119_Assignmt#page1.tif

PATENT

REEL: 031453 FRAME: 0016

0400041

U.S. ASSIGNMENT

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned inventor(s) (hereinafter "ASSIGNOR") by

| (insert | FANUC CORPORATION | | | | | | |
|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------|--------------------------|--|--|--|
| ASSIGNEE's Name(s) Address(es)) | 3580, Shibokusa Aza-Komanba, Oshino-mura, Minamitsuru-gun, Yamanashi 401-0597 | | | | | | |
| | Japan | | | | | | |
| | | | | | | | |
| | | | *************************************** | | | | |
| | | | | | | | |
| | (hereinafter "ASSIGNEE"), the receipt o transfers to ASSIGNEE the entire and t | | | assigna and | | | |
| (Title of Invention) | TEMPERATURE ESTIMA | TEMPERATURE ESTIMATION APPARATUS FOR ESTIMATING TEMPERATURE OF | | | | | |
| , | MOTOR | | | ************************ | | | |
| | relating to International Patent Applica of the United States was executed on e | tion PCT/JP// ven date herewith or, if not so executed | and/or for which application for I d, was: | etters Patent | | | |
| (Insert date of execution of application, if not concurrent) | (a) executed on | Assignce's attorney is her data, when known. | eby authorized to insert in (b) the soci | ified | | | |
| | and to said application and all Letters Patent(s) of the United States granted on said application and any continuation, division, renewal, substitute, reissue or reexamination application based thereon, for the full term or terms for which the said Letters Patent(s) may be granted and including any extensions thereof (collectively, hereinafter, "said application(s) and Letters Patent(s)"). The ASSIGNOR agree(s), when requested by said ASSIGNEE and without charge to but at the expense of said ASSIGNEE, to do all acts which the ASSIGNEE may deem necessary, desirable or expedient, for securing, maintaining and enforcing protection for said invention, including in the preparation and prosecution of said application(s) and the issuance of said Letters Patent(s), in any interference, reissue, recommination, or public use proceeding, and in any litigation or other legal proceeding which may arise or be declared in relation to same, such acts to include but not be limited to executing all papers, including separate assignments and declarations, taking all rightful oaths, providing aworn testimony, and obtaining and producing evidence. | | | | | | |
| | in witness whereof, the | undersigned inventor(s) has (bave) aff | ixed his/her/their signature(s). | | | | |
| (Signatures) | 1) Jatouga Server (SIGNATURE) | Tatsuya Senoo | October 2, 2013 | | | | |
| | 2) | | | | | | |
| | (SIGNATURE) | (TYPE NAME) | (DATE) | | | | |
| | 3)(SIGNATURE) | (TYPE NAME) | (DATE) | | | | |
| | 4)(SIGNATURE) | (TYPE NAME) | (DATE) | | | | |
| | 5) (SIGNATURE) | (TYPE NAME) | (DATE) | | | | |
| | 6)(SIGNATURE) | (TYPE NAME) | (DATE) | | | | |
| | 7)(SIGNATURE) | (TYPE NAME) | (DATS) | | | | |

(TYPE NAME)

PATENT REEL: 031453 FRAME: 0017

(DATE)

RECORDED: 10/22/2013

(SIONATURE)