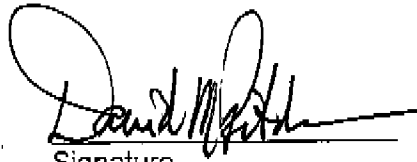


FORM PTO-1595	<b>RECORDATION FORM COVER SHEET</b> Patent and Trademark Office <b>PATENTS ONLY</b>	U.S. DEPARTMENT OF COMMERCE
©2005 Staas & Halsey LLP To the Director of the U.S. Patent and Trademark Office: Please record the attached document.		

1. Name of conveying parties:  
 (1) Hiroshi ISOBE                      (2) Takayoshi OZAKI                      (3) Norihiko SASAKI
  
2. Name and Address of receiving party:  
 NTN CORPORATION  
 3-17, Kyomachibori 1-chome,  
 Nishi-ku, Osaka-shi,  
 OSAKA 550-0003  
 JAPAN
  
3. Nature of conveyance:  

<input type="checkbox"/> Assignment	<input type="checkbox"/> Merger
<input type="checkbox"/> Security Agreement	<input type="checkbox"/> Change of Name
<input checked="" type="checkbox"/> Other: <u>Record to correct the second and third Assignors' Execution Dates to specify</u> <u>September 20, 2007, September 14, 2007, respectively.</u> Execution Date(s): <u>(1) (2) September 20, 2007; (3) September 14, 2007</u>	
  
4. Application number(s) or patent number(s):  
☐ This document is being filed together with a new application.  
 OR  
☒ This document is being filed after filing of the application:  
 (a) Patent Application No(s). 11/918,677, filed October 17, 2007; or  
 (b) Patent No(s). , issued .
  
5. Name and address of party to whom correspondence concerning document should be mailed:  
 STAAS & HALSEY LLP                      Our Docket: 1761.1113  
 Attention: David M. Pitcher  
 1201 New York Ave., N.W., 7th Floor  
 Washington, D.C. 20005
  
6. Total number of applications and patents involved: 1
  
7. Total fee (37 CFR 3.41)..... (\$ 40.00 per Patent or Application in Assignment)  
☐ Enclosed  
☒ Authorized to be charged to deposit account.
  
8. Deposit Account No.: 19-3935 (Any underpayment is authorized to be charged to this Deposit Account)  
 (Attach duplicate copy of this page if paying by deposit account)

David M. Pitcher, Reg. No. 25,908  
 Name of Person Signing

  
 Signature

March 5, 2008  
 Date

Total number of pages including cover sheet: 7

DO NOT USE THIS SPACE

10-25-2007

8240

11/918677



103456135

ORDINATION FORM COVER SHEET

U.S. DEPARTMENT OF COMMERCE

PATENT REG'D PCT/PTO 16 OCT 2007

Mark Office: Please record the attached document.

1. Name of conveying party(ies):  
Hiroshi ISOBE  
Takayoshi OZAKI  
Norihiko SASAKI
2. Name and Address of receiving party(ies):  
  
NTN CORPORATION  
3-17, Kyomachibori 1-chome,  
Nishi-ku, Osaka-shi,  
OSAKA 550-0003  
JAPAN
3. Nature of conveyance:  
☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other: \_\_\_\_\_  
Execution Date(s): September 20, 2007; September 14, 2007; September 20, 2007 respectively.
4. Application number(s) or patent number(s):  
☒ This document is being filed together with a new application.  
☐ This document is being filed after filing of the application:  
(a) Patent Application No(s) . , filed ; or  
(b) Patent No(s) . , issued .
5. Name and address of party to whom correspondence concerning document should be mailed:  
STAAS & HALSEY LLP  
Attention: David M. Pitcher  
1201 New York Ave., N.W., Suite 700  
Washington, D.C. 20005  
Our Docket: 1761.1113
6. Total number of applications and patents involved: 1
7. Total fee (37 CFR 3.41)..... (\$ 40.00 per Patent or Application in Assignment)  
☒ Enclosed  
☐ Authorized to be charged to deposit account.
8. Deposit Account No.: 19-3935 (Any underpayment is authorized to be charged to this Deposit Account)  
(Attach duplicate copy of this page if paying by deposit account)

10/19/2007 NKATPASH 00000022 11918677

05 FC:8021

40.00 DP

David M. Pitcher, Reg. No. 25,908  
Name of Person Signing  
SignatureOctober 17, 2007  
Date

Total number of pages including cover sheet: 4

DO NOT USE THIS SPACE

## Assignment

## 譲渡証

## Japanese Language Assignment

(1-8) Insert Name(s) of Inventor(s)

発明者の氏名を記入すること

(1) Hiroshi ISOBE of SHIZUOKA, JAPAN

(2) Takayoshi OZAKI of SHIZUOKA, JAPAN

(3) Norihiko SASAKI of SHIZUOKA, JAPAN

(4)

(5)

(6)

(7)

(8)

各々の署名人に対して支払われた総額1ドル  
(\$1.00)および他の適切な有価約因を考慮して、各々の署名人は

In consideration of the sum of one dollar (\$1.00) and  
other good and valuable consideration paid to each of the  
undersigned, each undersigned agrees to assign, and hereby  
does assign, transfer and set over to

(9) Insert Name of Assignee

譲受人氏名を記入すること

(9) NTN CORPORATION

(10) Insert Address of Assignee

譲受人住所を記入すること

(10)

3-17, Kyomachibori 1-chome, Nishi-ku, Osaka-shi, OSAKA 550-0003 JAPAN

(以降譲受人と称する)に対して、譲渡に同意し、ここに譲渡し、  
米国法第35章第100条に定義されるごとく、この発明および  
仮出願、非仮出願、分割出願、継続出願、差替え出願、及び再  
発行出願、および前記発明に関するすべての特許証、延長証、  
再発行証、再審査証を含む特許のための全ての出願において、  
アメリカ合衆国のためのすべての権利、所有権、および利益を  
譲受人の継承人、後継者、非譲渡者、および法定代理人に移転  
および譲渡し、

(hereinafter designated as the Assignee) and Assignee's heirs,  
successors, assigns and legal representatives, the entire right,  
title and interest for the United States of America as defined  
in 35 U.S.C. §100, in the invention, and in all applications for  
patent including any and all provisional, non-provisional,  
divisional, continuation, substitute, and reissue application(s),  
and all Letters Patent, extensions, reissues and reexamination  
certificates that may be granted on the invention known as

(11) Insert Identification such as Title, Case Number, or  
Foreign Application Number名称、事件番号、もしくは外国出願番号のような確  
認事項を記入のこと

(11) Device for detecting absolute ~~rotation~~ of multiple rotation  
and angle detection method

(Attorney Docket No.

弁護士整理番号

前記署名人が下記の日付でアメリカ合衆国において特許出願を  
履行するものであり、

for which the undersigned has (have) executed an application  
for patent in the United States of America on even date  
herewith

Or

もしくは

(12) Insert Date of Signing of Application

出願に署名する日付を記入のこと

(12) on

(13) Alternative Identification for filed applications

提出された出願のための代案確認事項

(13) U.S. application Serial Number

右記の米国出願整理番号で

Filed:

上記日付において提出されたものである。

1) 各々の署名人は前記発明のための出願関係および、  
継続出願、分割出願、再発行出願およびこの件に関  
しての発行する特許において、必要な全ての書類を  
履行することに同意し、譲受人が必要と思われる、  
このような出願および特許に関しての別途譲渡証を  
履行することにも同意する。

2) 各々の署名人は、前記発明のための、出願もしくは  
継続出願、もしくはその分割出願、特許もしくはそ  
れに基づく再発行出願に関して宣言されるインター  
フェレンスに関して必要な全ての書類を履行するこ  
とに同意し、証拠取得およびそのようなインター  
フェレンスを進行するにあたり、いかなる方法におい  
ても前記譲受人と協力することに同意する。

3) 各々の署名人は、すべての用紙および書類を履行し  
、国際工業所有権保護協定の請求もしくは規定もし  
しくは類似協定に関して必要ないかなる行為を履行す  
ることに同意する。

4) 各々の署名人は、前記譲受人に対して有効な米国特  
許の承認を取得し、維持し、もしくは再発行もしく  
は再審査により、確認するために、必要なすべての  
積極的な行為を履行することに同意する。

5) 各々の署名人は、全ての利益の譲受人として、特許  
庁長官に前記出願から発生したすべての米国特許証  
を前記譲受人に対して発行することを許可および請  
求し、ここに署名するにおいて、譲受人は全ての利  
益を譲るためのすべての権利を有し、対立関係にある  
協定を過去に履行することなくもしくは将来履行  
しないことを誓約し、この協定が前記譲受人、譲受  
人の継承人、後継者、非譲渡者、および法定代理人  
に法的義務を負わせるものであることに同意する。

6) 各々の署名人は、この書類の記録上、米国特許商標  
庁の規定に従うために、必要もしくは所望であれば  
この譲渡証にさらに確認事項を記入するための権利  
が(事務所名を下記に記入)

STAAS & HALSEY LLP

1) Each undersigned agrees to execute all papers  
necessary in connection with any application and any  
continuing, divisional or reissue applications for the  
invention, and any patent(s) issuing thereon, and also to  
execute separate assignments in connection with such  
applications and patents as the Assignee may deem necessary.

2) Each undersigned agrees to execute all papers  
necessary in connection with any interference which may be  
declared concerning any application or continuation or  
division thereof, or any patent or reissue application based  
thereon, for the invention, and to cooperate with the Assignee  
in every way possible in obtaining evidence and going  
forward with such interference.

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

4) Each undersigned agrees to perform all affirmative  
acts which may be necessary to obtain, maintain or confirm by  
reissue or reexamination a grant of a valid United States  
patent to the Assignee.

5) Each undersigned authorizes and requests the  
Commissioner of Patents to issue any and all Letters Patents  
of the United States resulting from said application(s) to the  
said Assignee, as Assignee of the entire interest, and  
covenants that he has full right to convey the entire interest  
herein assigned, and that he has not executed, and will not  
execute, any agreements in conflict herewith, and agrees that  
this assignment is binding on him and his heirs, successors,  
assigns and legal representatives.

6) Each undersigned hereby grants the firm of STAAS  
& HALSEY LLP the power to insert on this assignment any  
further identification that may be necessary or desirable in  
order to comply with the rules of the United States Patent and  
Trademark Office for recordation of this document.

PATENT

REEL: 020620 FRAME: 0240

証人立ち会いのもとで、署名人の隣の日付をもってこの署名が履行される。

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

Date September 20, 2007 Inventor Signature  
日付 発明者署名

Hiroshi Isobe (SEAL )  
Hiroshi ISOBE 印

Date \_\_\_\_\_ Inventor Signature  
日付 発明者署名

\_\_\_\_\_ (SEAL )  
\_\_\_\_\_ 印

Date September 14, 2007 Inventor Signature  
日付 発明者署名

Norihiko Sasaki (SEAL )  
Norihiko SASAKI 印

Date \_\_\_\_\_ Inventor Signature  
日付 発明者署名

\_\_\_\_\_ (SEAL )  
\_\_\_\_\_ 印

Date September 20, 2007 Inventor Signature  
日付 発明者署名

Takayoshi Ozaki (SEAL )  
Takayoshi OZAKI 印

この譲渡証は(a)アメリカ合衆国内で署名される際には公証人の面前で、(b)アメリカ合衆国外で署名される際には米国籍領事の面前で署名されるべきである。(a)もしくは(b)が不可能な際には、下記に署名する少なくとも二人の証人の面前で署名されるべきである。

This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here:

Date \_\_\_\_\_ Witness  
日付 証人

Date \_\_\_\_\_ Witness  
日付 証人