

PATENT ASSIGNMENT

Electronic Version v1.1

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SUBMISSION TYPE:	NEW ASSIGNMENT														
NATURE OF CONVEYANCE:	ASSIGNMENT														
CONVEYING PARTY DATA															
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Kazumasa Nishimura</td><td>11/22/2007</td></tr><tr><td>Ryo Nakabayashi</td><td>11/22/2007</td></tr><tr><td>Naoya Hasegawa</td><td>11/22/2007</td></tr><tr><td>Masamichi Saito</td><td>11/22/2007</td></tr><tr><td>Yosuke Ide</td><td>11/28/2007</td></tr><tr><td>Masahiko Ishizone</td><td>11/22/2007</td></tr></tbody></table>	Name	Execution Date	Kazumasa Nishimura	11/22/2007	Ryo Nakabayashi	11/22/2007	Naoya Hasegawa	11/22/2007	Masamichi Saito	11/22/2007	Yosuke Ide	11/28/2007	Masahiko Ishizone	11/22/2007	
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Masamichi Saito	11/22/2007														
Yosuke Ide	11/28/2007														
Masahiko Ishizone	11/22/2007														
RECEIVING PARTY DATA															
Name:	Alps Electric Co., Ltd.														
Street Address:	1-7 Yukigaya, Otsuka-cho, Ota-ku														
City:	Tokyo														
State/Country:	JAPAN														
PROPERTY NUMBERS Total: 1															
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>11947315</td></tr></tbody></table>	Property Type	Number	Application Number:	11947315											
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Application Number:	11947315														
CORRESPONDENCE DATA															
Fax Number:	(312)321-4299														
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>															
Email:	cbrady@usebrinks.com														
Correspondent Name:	Brinks Hofer Gilson & Lione														
Address Line 1:	P.O. Box 10395														
Address Line 4:	Chicago, ILLINOIS 60610														
ATTORNEY DOCKET NUMBER:	9281-5580														
NAME OF SUBMITTER:	Gustavo Siller, Jr.														

CH \$40.00 11947315

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PATENT
REEL: 020178 FRAME: 0100

Total Attachments: 4

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RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below:

1. Name of conveying Party(ies)/Execution Date:

KAZUMASA NISHIMURA/NOVEMBER 22, 2007
 RYO NAKABAYASHI/NOVEMBER 22, 2007
 NAOYO HASEGAWA/NOVEMBER 22, 2007
 MASAMICHI SAITO/NOVEMBER 22, 2007
 YOSUKE IDE/NOVEMBER 22, 2007
 MASAHIKO ISHIZONE/NOVEMBER 22, 2007

Additional name(s) of conveying party(ies) attached?

☐ Yes ☒ No

2. Name and Address of receiving Party(ies):

Name: ALPS ELECTRIC CO., LTD.

Street Address: 1-7 Alps Electric Co., Ltd.

City: Tokyo

Country: Japan

Additional name(s) and addresses attached? ☐ Yes ☒ No

3. Nature of Conveyance:

Execution Date(s): November 22, 2007

- ☒ Assignment ☐ Change of Name ☐ Executive Order 9424, Confirmatory License
☐ Security Agreement ☐ Merger ☐ Joint Research Agreement
☐ Government Interest Assignment ☐ Other _____

4. Application or patent number(s).

☒ This document is being filed together with a new application.

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

BRINKS HOFER GILSON & LIONE
 P.O. BOX 10395
 CHICAGO, IL 60610
 (312) 321-4200
 (312) 321-4299 Fax

6. Total number of applications and patents involved: 1

7. Total Fee (37 CFR 1.21(h) & 3.41) **\$ 40**

- ☐ Authorized to be charged by credit card
☒ Authorized to be charged to Deposit Acct. No. 23-1925
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information:

- a. ☐ Credit Card: Last 4 Numbers
 Expiration Date
 b. ☒ Charge fee and/or any Deficiencies to Deposit
 Account Number 23-1925
 Authorized User Name: Brinks Hofer Gilson & Lione

/Gustavo Siller, Jr./

November 29, 2007

Signature

Date

Gustavo Siller, Jr.

Total no. of pages including coversheet, attachments and documents: 4

Name of Person Signing

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
 Mail Stop Assignment Recordation Services, Director of the USPTO, PO Box 1450, Alexandria, VA 22313-1450

ASSIGNMENT

WHEREAS, Kazumasa Nishimura, Ryo Nakabayashi, Naoya Hasegawa,
Masamichi Saito, Yosuke Ide and Masahiko Ishizone
hereinafter called the "Assignors", have made the invention described in the United States patent
application entitled TUNNELING MAGNETIC DETECTING ELEMENT AND METHOD FOR
MAKING THE SAME
executed by Assignors on the same date as, or on a date prior to, this Assignment;

WHEREAS, ALPS ELECTRIC CO., LTD., a corporation organized and
existing under the laws of Japan, having a place of business at 1-7 Yukigaya,
Otsuka-cho, Ota-ku, in Tokyo, Japan, hereinafter called the "Assignee," desires to
acquire the entire right, title and interest in and to the invention and the patent
application identified above, and all patents which may be obtained for said invention,
as set forth below;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other
valuable and legally sufficient consideration, the receipt of which by the Assignors from the
Assignee is hereby acknowledged, the Assignors have sold, assigned and transferred, and by
these presents do sell, assign and transfer to the Assignee, the entire right, title and interest for
the United States in and to the invention and the patent application identified above, and any
patents that may issue for said invention in the United States; together with the entire right, title
and interest in and to said invention and all patent applications and patents therefor in all
countries foreign to the United States, including the full right to claim for any such application all
benefits and priority rights under any applicable convention; together with the entire right, title
and interest in and to all continuations, divisions, renewals and extensions of any of the patent
applications and patents defined above; together with the right to recover all damages, including,
but not limited to, a reasonable royalty, by reason of past, present, or future infringement or any
other violation of patent or patent application rights; to have and to hold for the sole and exclusive
use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms
for all such patents.

The Assignors hereby covenant and agree, for both the Assignors and the
Assignors' legal representatives, that the Assignors will assist the Assignee in the prosecution of
the patent application identified above; in the making and prosecution of any other patent
applications that the Assignee may elect to make covering the invention identified above; in
vesting in the Assignee like exclusive title in and to all such other patent applications and patents;
and in the prosecution of any interference which may arise involving said invention, or any such
patent application or patent; and that the Assignors will execute and deliver to the Assignee any
and all additional papers which may be requested by the Assignee to carry out the terms of this
Assignment.

The Commissioner of Patents and Trademarks is hereby authorized and requested to issue patents to the Assignee in accordance with the terms of this Assignment.

IN TESTIMONY WHEREOF, the Assignors have executed this agreement.

DATE: November 22, 2007

Kazumasa Nishimura
Inventor: Kazumasa Nishimura

WITNESSED:

DATE: November 22, 2007

Takashi Sato

DATE: November 22, 2007

Nobuhiko Hayashi

DATE: November 22, 2007

Ryo Nakabayashi

Inventor: Ryo Nakabayashi

WITNESSED:

DATE: November 22, 2007

Takashi Sato

DATE: November 22, 2007

Nobuhiko Hayashi

DATE: November 22, 2007

Naoya Hasegawa
Inventor: Naoya Hasegawa

WITNESSED:

DATE: November 22, 2007

Takashi Sato

DATE: November 22, 2007

Nobuhiko Hayashi

DATE: November 22, 2007

Masamichi Saito
Inventor: Masamichi Saito

WITNESSED:

DATE: November 22, 2007

Takashi Sato

DATE: November 22, 2007

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DATE: November 22, 2007

Yosuke Ide
Inventor: Yosuke Ide

WITNESSED:

DATE: November 22, 2007

Tabashi Sato

DATE: November 22, 2007

Nobuhiko Idagashi

DATE: November 22, 2007

Masahiko Ishizone
Inventor: Masahiko Ishizone

WITNESSED:

DATE: November 22, 2007

Tabashi Sato

DATE: November 22, 2007

Nobuhiko Idagashi

DATE: _____

Inventor:

WITNESSED:

DATE: _____

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