Form PTO-1 OMB No. 065

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| WI COVER SHEET | 1 + | • | d | - | . a | · 1 | 4D) |
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| To the Director of the U.S. Patent and Trademark Office: Please | record the attached documents or the new address(es) below. |
| Name of conveying party(ies): | 2. Name and address of receiving party(ies) |
| Hideo OKAMOTO (05/01/2008), Tadayuki HIRAGA (05/01/2008), Hiroitsu OHTA | Name: RINNAI CORPORATION |
| (05/01/2008), Mineyuki NASU (05/01/2008), and | Internal Address: |
| Additional name(s) of conveying party(ies) attached? X Yes No | Street Address: |
| 3. Nature of conveyance/Execution Date(s): | 2-26, Fukuzumi-cho, Nakagawa-ku |
| Execution Date(s): in parentheses after inventor name | Nagoya-shi, Aichi 454-0802 |
| x Assignment Merger Change of Name | JAPAN |
| Security Agreement Joint Research Agreement | City: |
| Government Interest Assignment | State: |
| Executive Order 9424, Confirmatory License | Country: Zip: |
| Other | Additional name(s) & address(es) Yes X No attached: |
| (| |
| | This document is being filed together with a new application. |
| A. Patent Application No.(s) NEW | B. Patent No.(s) |
| 1454 | |
| | |
| Additional numbers attached? | Yes X No |
| 5. Name and address to whom correspondence concerning document should be mailed: | 6. Total number of applications and patents involved: |
| Name: James M. Slattery | |
| BIRCH, STEWART, KOLASCH & BIRCH, LLP | 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 |
| | Authorized to be charged by credit card |
| Internal Address: Atty. Dkt.: 4379-0214PUS1 Street Address: 8110 Gatehouse Road | |
| Suite 100 East | X Authorized to be charged to deposit account |
| P.O. Box 747 | Enclosed |
| | None required (government interest not affecting title) |
| City: Falls Church | 8. Payment Information |
| State: VA Zip: 22040-0747 | a. Credit Card Last 4 Numbers |
| Phone Number: (703) 205-8015 | Expiration Date |
| Fax Number: (703) 205-8050 | b. Deposit Account Number 02-2448 |
| Email Address: mailroom@bskb.com | Authorized User Name James M. Slattery |
| D. Signature: | September 18, 2008 |
| Signature | / N D-4- |
| | Date |
| James M. Slattery - 28,380 | Total number of pages including cover sheet, attachments, and documents: 4 |

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RECORDATION FORM COVER SHEET Form PTO-1595 (continued) Additional Conveying Party(ies)/Execution Date(s) (1. Continued): Hiroaki SASAKI (05/01/2008) Additional Assignees (2. Continued): Assignee Name: Internal Address: Street Address: ______ State: _____ Country: _____ Zip: _____ Assignee Name: Internal Address: Street Address: Assignee Name: Internal Address: Street Address:
 City:
 _______ State:
 _______ Country:
 _______ Zip:
 Additional Applications and/or Patents (4. Continued): Additional Patent Application Numbers Additional Patent Numbers 4A. Continued: 4B. Continued: Additional numbers attached? Yes No

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Docket No.: 4379-0214PUS1

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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ASSIGNMENT

| | Application No. NEW | | Filed September 18, | | | | | |
|---------------------------------|---|---|---|--|--|--|--|--|
| nsert Name(s) of Inventor(s) | ***(Given Name FAMILY NAME (ALL CAPS))*** | | | | | | | |
| | WHEREAS, | Hideo OKAMOTO | ; Tadayuki HIRAGA | | | | | |
| | Hiroitsu OHTA | , Mineyuki NASU | Hiroaki SASAKI | | | | | |
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| | (hereinafter designated as the un | ndersigned) has (have) invented cer | tain new and useful improvements in | | | | | |
| nsert Title | | | | | | | | |
| f Invention | | | | | | | | |
| | for which an application for Le undersigned (except in the case | | f America has been executed by the | | | | | |
| nsert Date | | | | | | | | |
| f Signing of | Moss 1 2000 | | | | | | | |
| pplication | on May 1, 2008, r | espectively | ; and | | | | | |
| nsert Name f Assignee | WHEREAS, | | | | | | | |
| - | WHEREST IS, | | | | | | | |
| nsert Address f Assignee | of | , Nakagawa-ku, Nagoya- | shi, Aichi 454-0802, Japan | | | | | |
| | desirous of acquiring the entire | | rter designated as the Assignee) is a said invention and in and to any | | | | | |
| HECK BOX APPROPRIATE | in any foreign countries. | inted dieteror in the Officed States of | TAMETOL MU | | | | | |
| | paid, the receipt of which is he | ereby acknowledged, and other go | (\$10.00) to the undersigned in hand od and valuable consideration, the nese presents does sell, assign and | | | | | |
| | transfer unto said Assignee the America, its territories, depende any and all Letters Patent(s) v | e full and exclusive right to the sai encies and possessions and the ent which may be granted therefor in | id invention in the United States of ire right, title and interest in and to the United States of America, its designated, in any and all foreign | | | | | |
| | and to any and all divisions, re term or terms for which the same | | and extensions thereof for the full | | | | | |

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PATENT REEL: 021583 FRAME: 0955 The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree (s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letter Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

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

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States of America patent(s) or a grant of a valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patents resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

The undersigned hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

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

| Date May 1, 2008, | Name of Inventor Hiller Chameto |
|-------------------|--|
| Date May 1, 2008 | (signature) Hideo OKAMOTO Name of Inventor Vadayuki Hiraga (signature) Tadayuki HIRAGA |
| Date May 1, 2008, | Name of Inventor <u>Hiroitsu</u> <u>Ohta</u> (signature) Hiroitsu OHTA |
| Date May 1, 2008 | Name of Inventor Mineyuki Masu (signature) Mineyuki NASU |
| Date May 1, 2008, | Name of Inventor Hiroaki Assaki (signature) Hiroaki SASAKI |
| Date | Name of Inventor(signature) |

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June 2002

PATENT REEL: 021583 FRAME: 0956