

PATENT ASSIGNMENT

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SUBMISSION TYPE:

NEW ASSIGNMENT

NATURE OF CONVEYANCE:

ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Shinya HAMASAKI	04/21/2011
Toshimi OHTSUKA	04/21/2011
Yoshinori KOYAMA	04/21/2011
Katsuhiko YOKOHAMA	04/21/2011
Yasunari SHIBATA	04/21/2011
Jun KASAI	04/21/2011

RECEIVING PARTY DATA

Name:	MITSUBISHI HEAVY INDUSTRIES, LTD.
Street Address:	16-5, Konan 2-chome, Minato-ku
City:	Tokyo
State/Country:	JAPAN
Postal Code:	108-8215

Name:	CLEAN COAL POWER R&D CO., LTD.
Street Address:	102-3, Iwamamachi-kawada
City:	Iwaki-shi, Fukushima
State/Country:	JAPAN
Postal Code:	974-8222

Name:	HOKKAIDO ELECTRIC POWER COMPANY, INCORPORATED
Street Address:	2, Higashi 1-chome, Odori, Chuo-ku
City:	Sapporo, Hokkaido
State/Country:	JAPAN
Postal Code:	060-8677

Name:	TOHOKU ELECTRIC POWER CO., INC.
Street Address:	1-7-1 Honcho, Aoba-ku
City:	Sendai, Miyagi

501545024

PATENT
REEL: 026345 FRAME: 0523

CH \$40.00 13120791

State/Country:	JAPAN
Postal Code:	980-8550

Name:	THE TOKYO ELECTRIC POWER COMPANY, INCORPORATED
Street Address:	1-3 Uchisaiwai-cho 1-chome, Chiyoda-ku
City:	Tokyo
State/Country:	JAPAN
Postal Code:	100-8560

Name:	CHUBU ELECTRIC POWER CO., INC.
Street Address:	1, Higashishin-cho, Higashi-ku
City:	Nagoya-shi, Aichi
State/Country:	JAPAN
Postal Code:	461-8680

Name:	HOKURIKU ELECTRIC POWER COMPANY
Street Address:	15-1, Ushijimacho
City:	Toyama-shi, Toyama
State/Country:	JAPAN
Postal Code:	930-8686

Name:	THE KANSAI ELECTRIC POWER CO., INC.
Street Address:	6-16, Nakanoshima 3-Chome, Kita-ku
City:	Osaka-shi, Osaka
State/Country:	JAPAN
Postal Code:	530-8270

Name:	THE CHUGOKU ELECTRIC POWER CO., INC.
Street Address:	4-33, Komachi, Naka-ku
City:	Hiroshima-shi, Hiroshima
State/Country:	JAPAN
Postal Code:	730-8701

Name:	SHIKOKU ELECTRIC POWER CO., INC.
Street Address:	2-5, Marunouchi
City:	Takamatsu-shi, Kagawa
State/Country:	JAPAN
Postal Code:	760-8573

Name:	KYUSHU ELECTRIC POWER CO., INC
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Street Address:	1-82, Watanabedori 2-chome, Chuo-ku
City:	Fukuoka-shi, Fukuoka
State/Country:	JAPAN
Postal Code:	810-8720

Name:	ELECTRIC POWER DEVELOPMENT CO., LTD.
Street Address:	15-1, Ginza 6-chome, Chuo-ku
City:	Tokyo
State/Country:	JAPAN
Postal Code:	104-8165

Name:	CENTRAL RESEARCH INSTITUTE OF ELECTRIC POWER INDUSTRY
Street Address:	1-6-1, Ohtemachi, Chiyoda-ku
City:	Tokyo
State/Country:	JAPAN
Postal Code:	100-8126

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13120791

CORRESPONDENCE DATA

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NAME OF SUBMITTER:	Charles Gorenstein

Total Attachments: 3
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BIRCH, STEWART, KOLASCH & BIRCH, LLPUNITED STATES PATENT RIGHTS, OR
UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS**ASSIGNMENT**Application No. 13/120,791 Filed March 24, 2011Insert Name(s)
of Inventor(s)

*** (Given Name FAMILY NAME (ALL CAPS)) ***

WHEREAS, **Shinya HAMASAKI, Toshimi OHTSUKA, Yoshinori KOYAMA, Katsuhiko YOKOHAMA, Yasunari SHIBATA, Jun KASAI** (hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in:

Insert Title
of Invention**SLAG-MELTING BURNER APPARATUS**

for which an application for Letters Patent of the United States of America has been executed by the undersigned (except in the case of a provisional application)

Insert Date
of Signing of
Application
Insert Name
of AssigneeOn February 18, 2011; and

WHEREAS, 1) MITSUBISHI HEAVY INDUSTRIES, LTD.; 2) CLEAN COAL POWER R&D CO., LTD.; 3) HOKKAIDO ELECTRIC POWER COMPANY, INCORPORATED; 4) TOHOKU ELECTRIC POWER CO., INC.; 5) THE TOKYO ELECTRIC POWER COMPANY, INCORPORATED; 6) CHUBU ELECTRIC POWER CO., INC.; 7) HOKURIKU ELECTRIC POWER COMPANY; 8) THE KANSAI ELECTRIC POWER CO., INC.; 9) THE CHUGOKU ELECTRIC POWER CO., INC.; 10) SHIKOKU ELECTRIC POWER CO., INC.; 11) KYUSHU ELECTRIC POWER CO., INC.; 12) ELECTRIC POWER DEVELOPMENT CO., LTD.; and 13) CENTRAL RESEARCH INSTITUTE OF ELECTRIC POWER INDUSTRY

Insert Address
of Assignee

of 1) 16-5, Konan 2-chome, Minato-ku, Tokyo 108-8215, Japan; 2) 102-3, Iwamamachi-kawada, Iwaki-shi, Fukushima 974-8222, Japan; 3) 2, Higashi 1-chome, Odori, Chuo-ku, Sapporo, Hokkaido 060-8677, Japan; 4) 1-7-1, Honcho, Aoba-ku, Sendai, Miyagi 980-8550, Japan; 5) 1-3, Uchisaiwai-cho 1-chome, Chiyoda-ku, Tokyo 100-8560, Japan; 6) 1, Higashishin-cho, Higashi-ku, Nagoya-shi, Aichi 461-8680, Japan; 7) 15-1, Ushijimacho, Toyama-shi, Toyama 930-8686, Japan; 8) 6-16, Nakanoshima 3-Chome, Kita-ku, Osaka-shi, Osaka 530-8270, Japan; 9) 4-33, Komachi, Naka-ku, Hiroshima-shi, Hiroshima 730-8701, Japan; 10) 2-5, Marunouchi, Takamatsu-shi, Kagawa 760-8573, Japan; 11) 1-82, Watanabedori 2-chome, Chuo-ku, Fukuoka-shi, Fukuoka 810-8720, Japan; 12) 15-1, Ginza 6-chome, Chuo-ku, Tokyo 104-8165, Japan; and 13) 1-6-1, Ohtemachi, Chiyoda-ku, Tokyo 100-8126, Japan

its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America and

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IF APPROPRIATE

in any foreign countries.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the undersigned has (have) sold, assigned and transferred, and by these presents does sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries; and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or terms for which the same may be granted.

in equal undivided amounts unless specific undivided amounts are listed below:

**OWNERSHIP
INTEREST**

Assignee 1 (30.00%); Assignee 2 (20.64%); Assignee 3 (0.58 %); Assignee 4 (1.14 %); Assignee 5 (38.81%); Assignee 6 (1.76 %); Assignee 7 (0.54 %); Assignee 8 (2.07 %); Assignee 9 (0.90 %); Assignee 10 (0.57 %); Assignee 11 (1.17%); Assignee 12 (0.91 %); Assignee 13 (0.91 %).

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	<u>APR. 21, 2011</u>	Name of Inventor	<u><i>Shinya Hamasaki</i></u> (signature) Shinya HAMASAKI
Date	<u>APR. 21, 2011</u>	Name of Inventor	<u><i>Toshimi OHTSUKA</i></u> (signature) Toshimi OHTSUKA
Date	<u>APR. 21, 2011</u>	Name of Inventor	<u><i>Yoshinori Koyama</i></u> (signature) Yoshinori KOYAMA
Date	<u>APR. 21, 2011</u>	Name of Inventor	<u><i>Katsuhiko Yokohama</i></u> (signature) Katsuhiko YOKOHAMA
Date	<u>APR. 21, 2011</u>	Name of Inventor	<u><i>Yasunari Shibata</i></u> (signature) Yasunari SHIBATA
Date	<u>APR. 21, 2011</u>	Name of Inventor	<u><i>Jun Kasai</i></u> (signature) Jun KASAI