PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT2886864

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TARO FUKAYA	03/14/2012
KENJI TSUTSUMI	03/24/2012
ATSUSHI YAMAZAKI	03/24/2012
ICHIRO YAMANASHI	03/26/2012
HIROFUMI NOGUCHI	03/24/2012
YASUTAKA KIKUCHI	03/26/2012
SHUJI SEKI	03/27/2012

RECEIVING PARTY DATA

Name:	KABUSHIKI KAISHA TOSHIBA
Street Address:	1-1, SHIBAURA 1-CHOME
City:	MINATO-KU, TOKYO
State/Country:	JAPAN
Postal Code:	105-8001

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14297227

CORRESPONDENCE DATA

Fax Number: (949)760-9502

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 9497600404

Email: efiling@knobbe.com

KNOBBE, MARTENS, OLSON & BEAR LLP **Correspondent Name:**

2040 MAIN STREET Address Line 1:

Address Line 2: 14TH FLOOR

Address Line 4: IRVINE, CALIFORNIA 92614

ATTORNEY DOCKET NUMBER:	SUTOSH.1098D1
NAME OF SUBMITTER:	KAZUO AOKI
SIGNATURE:	/Kazuo.Aoki/
DATE SIGNED:	06/05/2014

REEL: 033043 FRAME: 0209 502840268

PAIENI

Total Attachments: 3

source=SUTOSH-1098D1_Assignment#page1.tif

source=SUTOSH-1098D1_Assignment#page2.tif

source=SUTOSH-1098D1_Assignment#page3.tif

PATENT REEL: 033043 FRAME: 0210

ASSIGNMENT

In consideration of value received, I, having a residence as stated below above my name, the sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are listed below) of an invention described in an application for United States patent entitled:

COPPER RECOVERY APPARATUS

have sold and assigned and do hereby sell and assign to KABUSHIKI KAISHA TOSHIBA a Japanese corporation, having a business address at 1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan

its successors, assigns or nominees, hereinafter referred to as "Assignee", my entire right, title and interest in and to said invention as disclosed, shown and described in said United States patent application:

(check one)	[X]	executed concurrently herewith		
	[]	executed on	;	
	[]	Application No.	, filed	

and in and to all applications for patent and patents for invention including all divisions, reissues, continuations, substitutes and extensions thereof and all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property, including rights of priority, resulting from the filing of any of said applications; and I authorize and request any official whose duty is to issue patents, to issue any patent on said invention or resulting therefrom to said Assignee, and I agree that on request and without further consideration, but at the expense of said Assignee, I will communicate to said Assignee or its representatives all facts known to me respecting said invention and testify in any legal proceedings, sign all lawful papers, execute all divisional, continuing, continued prosecution, reissue, or other applications, make all rightful oaths and declarations, and generally do everything possible to aid said Assignee to obtain and enforce proper patent protection for said invention.

I hereby grant the following law firm 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.

Mr. Irfan Lateef, Knobbe, Martens, Olson & Bear LLP, 2040 Main Street, 14th Floor, Irvine, CA 92614

PATENT REEL: 033043 FRAME: 0211

ASSIGNMENT

[1st Inventor]	
Residence Address: Higashikurume-shi, Japan	
Mailing Address: c/o Intellectual Property Division, To	oshiba Corporation, 1-1, Shibaura 1-chome,
Minato-ku, Tokyo 105-8001, Japan	•
Citizenship: Japan	
Jan Filouse	March 24. 2012 Date:
Tano Tukaya Tano Fukaya	Doto'
Taro Fukaya	Date
[2nd Inventor]	
Residence Address: Yokohama-shi, Japan	
Mailing Address: c/o Intellectual Property Division, To	oshiba Corporation, 1-1, Shibaura 1-chome.
Minato-ku, Tokyo 105-8001, Japan	,,,,,
Citizenship: Japan	
Olinsenship outun	
7/ 1.1-4	
Kenji Tsutsumi Kenji Tsutsumi	Date:
Kenji Tsutsumi	Date:
[3rd Inventor]	
Residence Address: Tokyo, Japan	
Mailing Address: c/o Intellectual Property Division, T	oshiba Corporation, 1-1, Shibaura 1-chome,
Minato-ku, Tokyo 105-8001, Japan	
Citizenship: Japan	
at li y 1.	m - 1 21/ 2012
Atsushi Yamazaki Atsushi Yamazaki	March 24.20/2 Date:
Atsusni iamazaki	Date
[4th Inventor]	
Residence Address: Tokyo, Japan	
Mailing Address: c/o Intellectual Property Division, T	oshiba Corporation, 1-1, Shibaura 1-chome,
Minato-ku, Tokyo 105-8001, Japan	, , ,
Citizenship: Japan	
01- 11	M 1 - C - 10
Schero Yamanashi	March 26.2012
Ichiro Yamanashi	Date:
_	
[5th Inventor]	
Residence Address: Sakai-shi, Japan	
Mailing Address: c/o Intellectual Property Division, T	oshiba Corporation, 1-1, Shibaura I chome,
Minato-ku, Tokyo 105-8001, Japan	
Citizenship: Japan	
111 to the hours	m 1 3/1 34/2
Hirofumi Noguchi	<u>March</u> 24. 20/2 Date:
Hirotumi Noguchi	Date

ASSIGNMENT

> PATENT REEL: 033043 FRAME: 0213

RECORDED: 06/05/2014