

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT																				
NATURE OF CONVEYANCE:	ASSIGNMENT																				
CONVEYING PARTY DATA																					
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<table border="1"> <tr> <td>Name:</td> <td>KABUSHIKI KAISHA KOBE SEIKO SHO (KOBE STEEL, LTD.)</td> </tr> <tr> <td>Street Address:</td> <td>10-26, Wakinohama-cho 2-chome, Chuo-ku</td> </tr> <tr> <td>City:</td> <td>Kobe-shi, Hyogo</td> </tr> <tr> <td>State/Country:</td> <td>Japan</td> </tr> <tr> <td>Postal Code:</td> <td>651-8585</td> </tr> </table>		Name:	KABUSHIKI KAISHA KOBE SEIKO SHO (KOBE STEEL, LTD.)	Street Address:	10-26, Wakinohama-cho 2-chome, Chuo-ku	City:	Kobe-shi, Hyogo	State/Country:	Japan	Postal Code:	651-8585										
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Application Number:	13381679																				
CORRESPONDENCE DATA																					
Fax Number:	(703)413-2220																				
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ATTORNEY DOCKET NUMBER:	391270US41PCT
NAME OF SUBMITTER:	Adel Samuel
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ASSIGNMENT OF APPLICATION

WHEREAS I (WE) HIROYUKI MITANI, KYOJI ZAITSU, KENICHI INOUE, OSAMU OZAKI, HIROSHI HASHIMOTO, HIROFUMI HOJO, KOJI INOUE, EIICHIRO YOSHIKAWA and NAOYA FUJIWARA of c/o Kobe Corporate Research Laboratories in Kobe Steel, Ltd. 5-5, Takatsukadai 1-chome, Nishi-ku, Kobe-shi, Hyogo 651-2271 Japan, respectively, have invented certain new and useful improvements in:

REACTOR

(Application No. 13/381,679, filed December 30, 2011), and

WHEREAS, Kabushiki Kaisha Kobe Seiko Sho (Kobe Steel, Ltd.) having a place of business at: 10-26, Wakinohama-cho 2-chome, Chuo-ku, Kobe-shi, Hyogo 651-8585 Japan, (hereinafter referred to as "ASSIGNEE") is/are desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;

NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I (WE), by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted therefore in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.

I (WE) hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my (our) entire right, title and interest in and to the same, for the sole use and behalf of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me (us) had this Assignment and sale not been made.

Further, I (WE) agree that I (WE) will communicate to said ASSIGNEE or its (his) representatives any facts known to me (us) respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

The undersigned hereby grant(s) the firm of OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, L.L.P. of 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314 U.S.A. the power to insert on this assignment any further identification, including the application number and filing date, which 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.

Date November 1, 2010

三谷宏幸
HIROYUKI MITANI

Date November 1, 2010

財津享司
KYOJI ZAITSU

Date November 1, 2010

井上憲一
KENICHI INOUE

Date November 1, 2010

尾崎 修
OSAMU OZAKI

Date November 1, 2010

橋本裕志
HIROSHI HASHIMOTO

Date November 1, 2010

北条 啓文
HIROFUMI HOJO

Date November 1, 2010

井上 浩司
KOJI INOUE

Date November 1, 2010

吉川 英一郎
EIICHIRO YOSHIKAWA

Date November 1, 2010

藤原 直也
NAOYA FUJIWARA

Date