

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

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>Takahiro Ueda</td> <td>04/26/2013</td> </tr> <tr> <td>Koutarou Hori</td> <td>04/26/2013</td> </tr> <tr> <td>Tadashi Taninaga</td> <td>04/26/2013</td> </tr> <tr> <td>Hisataka Fukasu</td> <td>04/26/2013</td> </tr> <tr> <td>Takashi Itoi</td> <td>04/26/2013</td> </tr> </tbody> </table>		Name	Execution Date	Takahiro Ueda	04/26/2013	Koutarou Hori	04/26/2013	Tadashi Taninaga	04/26/2013	Hisataka Fukasu	04/26/2013	Takashi Itoi	04/26/2013
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<table border="1"> <tr> <td>Name:</td> <td>Komatsu Ltd.</td> </tr> <tr> <td>Street Address:</td> <td>2-3-6, Akasaka, Minato-ku</td> </tr> <tr> <td>City:</td> <td>Tokyo</td> </tr> <tr> <td>State/Country:</td> <td>JAPAN</td> </tr> <tr> <td>Postal Code:</td> <td>107-8414</td> </tr> </table>		Name:	Komatsu Ltd.	Street Address:	2-3-6, Akasaka, Minato-ku	City:	Tokyo	State/Country:	JAPAN	Postal Code:	107-8414		
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CORRESPONDENCE DATA													
<p>Fax Number: 6172274420 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 2024787375 Email: aangelov@edwardswildman.com Correspondent Name: EDWARDS WILDMAN PALMER LLP Address Line 1: P.O Box 55874 Address Line 4: Boston, MASSACHUSETTS 02205</p>													
ATTORNEY DOCKET NUMBER:	92763(302753)												
NAME OF SUBMITTER:	James E. Armstrong, IV												
Signature:	/James E. Armstrong, IV/												
Date:	05/29/2013												
Total Attachments: 1 source=92763_Assignment#page1.tif													

CH \$40.00 13825102

PATENT

U.S. ASSIGNMENT

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned inventor(s) (hereinafter, "ASSIGNOR") by
(Insert Name(s) & Address(es) of ASSIGNEE(S))

KOMATSU LTD.

2-3-6, Akasaka, Minato-ku, Tokyo 107-8414 Japan

(hereinafter, "ASSIGNEE"), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled
(Title of Invention)

MANAGEMENT SYSTEM OF MINING MACHINE AND MANAGEMENT METHOD OF MINING MACHINE

relating to International Patent Application PCT/JP2012/073370 and/or for which application for Letters Patent of the United States was executed on even date herewith or, if not so executed, was:

(a) executed on _____; (Insert date of execution of application, if not concurrent)

(b) filed on March 19, 2013.

Serial No. 13/825,102;

Assignee's attorney is hereby authorized to insert in (b) the specified data, when known.

and to said application and all Letters Patent(s) of the United States granted on said application and any continuation, division, renewal, substitute, reissue or reexamination application based thereon, for the full term or terms for which the said Letters Patent(s) may be granted and including any extensions thereof (collectively, hereinafter, "said application(s) and Letters Patent(s)").

The ASSIGNOR agree(s), when requested by said ASSIGNEE and without charge to but at the expense of said ASSIGNEE, to do all acts which the ASSIGNEE may deem necessary, desirable or expedient, for securing, maintaining and enforcing protection for said invention, including in the preparation and prosecution of said application(s) and the issuance of said Letters Patent(s), in any interference, reissue, reexamination, or public use proceeding, and in any litigation or other legal proceeding which may arise or be declared in relation to same, such acts to include but not be limited to executing all papers, including separate assignments and declarations, taking all rightful oaths, providing sworn testimony, and obtaining and producing evidence.

IN WITNESS WHEREOF, the undersigned inventor(s) has (have) affixed his/her/their signature(s).

1)	<u>T. Ueda</u> (Signature)	<u>Takahiro UEDA</u> (Type Name)	<u>Apr. 26, 2013</u> (Date)
2)	<u>Koutarou Hori</u> (Signature)	<u>Koutarou HORI</u> (Type Name)	<u>Apr. 26, 2013</u> (Date)
3)	<u>Tadashi Taninaga</u> (Signature)	<u>Tadashi TANINAGA</u> (Type Name)	<u>Apr. 26, 2013</u> (Date)
4)	<u>Hisataka Fukasu</u> (Signature)	<u>Hisataka FUKASU</u> (Type Name)	<u>Apr. 26, 2013</u> (Date)
5)	<u>Takashi ITO</u> (Signature)	<u>Takashi ITOI</u> (Type Name)	<u>Apr. 26, 2013</u> (Date)