

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT4444845

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ZHENCAI ZHU	05/05/2017
WEI LI	05/05/2017
GUOHUA CAO	05/05/2017
MINGQUAN QUI	05/05/2017
YONG REN	05/05/2017
XING ZHANG	05/05/2017
GONGBO ZHOU	05/05/2017
YUXING PENG	05/05/2017
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	CHINA UNIVERSITY OF MINING AND TECHNOLOGY
<b>Street Address:</b>	NO. 1 UNIVERSITY ROAD XUZHOU
<b>City:</b>	JIANGSU
<b>State/Country:</b>	CHINA
<b>Postal Code:</b>	221116
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	15525284
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(520)882-7643
<i>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.</i>	
<b>Phone:</b>	5208827623
<b>Email:</b>	vkirlin@hayes-soloway.com
<b>Correspondent Name:</b>	NORMAN P. SOLOWAY
<b>Address Line 1:</b>	4640 E SKYLINE DRIVE
<b>Address Line 4:</b>	TUCSON, ARIZONA 85718
<b>NAME OF SUBMITTER:</b>	NORMAN P SOLOWAY
<b>SIGNATURE:</b>	/norman p soloway/
<b>DATE SIGNED:</b>	06/05/2017

**Total Attachments: 8**

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ASSIGNMENT

I, Zhencai Zhu of Jiangsu, China, having invented certain inventions and improvements in **BREAKAGE DETECTION SYSTEM AND METHOD OF CHAINS OF A SCRAPER CONVEYOR** and having executed an application for Letters Patent of the United States of America describing the same and based thereon (U.S. Patent Application Serial No. 15/525,284, filed MAY 8, 2017), for good and valuable consideration, the receipt of which is hereby acknowledged from **CHINA UNIVERSITY OF MINING AND TECHNOLOGY** a Chinese University having its principal place of business at Science Academy of China University of Mining and Technology, No. 1 University Road, Xuzhou, Jiangsu, 221116 China (hereinafter called the Assignee), do hereby sell, assign and transfer unto the Assignee, its successors, and assigns my entire right, title, and interest, in and to said invention in the United States of America, including all rights, title and interest in the above-mentioned application and any divisional, continuing or reissue application or applications and any patent which may be issued on the said invention in the United States of America;

And for the same consideration I do agree that I will upon request execute any instrument which the Assignee may desire to carry this Assignment into effect and perfect the title transferred hereby or prosecute the above-mentioned application;

And I do hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America to issue Letters Patent on the said application to the Assignee;

And I do hereby jointly and severally covenant for myself and for my legal representatives that I have granted no right or license to make, use, or sell said invention to anyone except the Assignee, that prior to the execution of this deed my right, title, and interest in and to said inventions or any of them or any part thereof has not been otherwise encumbered by me, and that I have not executed and will not execute any instrument in conflict herewith.

IN WITNESS WHEREOF, I/we hereunto set my hand and seal on the day and year hereinafter noted.

Inventor's signature Zhencai Zhu Date 2017.5.5  
Full name: Zhencai Zhu

Witness: Tao Wang Witness: Wei Zhang  
Date: May 5, 2017 Date: 2017.5.5

**ASSIGNMENT**

I, Wei Li of Jiangsu, China, having invented certain inventions and improvements in **BREAKAGE DETECTION SYSTEM AND METHOD OF CHAINS OF A SCRAPER CONVEYOR** and having executed an application for Letters Patent of the United States of America describing the same and based thereon (U.S. Patent Application Serial No. 15/525,284, filed May 8, 2017), for good and valuable consideration, the receipt of which is hereby acknowledged from **CHINA UNIVERSITY OF MINING AND TECHNOLOGY** a Chinese University having its principal place of business at Science Academy of China University of Mining and Technology, No. 1 University Road, Xuzhou, Jiangsu, 221116 China (hereinafter called the Assignee), do hereby sell, assign and transfer unto the Assignee, its successors, and assigns my entire right, title, and interest, in and to said invention in the United States of America, including all rights, title and interest in the above-mentioned application and any divisional, continuing or reissue application or applications and any patent which may be issued on the said invention in the United States of America;

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IN WITNESS WHEREOF, I/we hereunto set my hand and seal on the day and year hereinafter noted.

Inventor's signature Wei Li Date 2017.5.5  
Full name: Wei Li

Witness: Tao Wang Witness: Wei Zhang  
Date: May 5, 2017 Date: 2017.5.5

**ASSIGNMENT**

I, Guohua Cao of Jiangsu, China, having invented certain inventions and improvements in **BREAKAGE DETECTION SYSTEM AND METHOD OF CHAINS OF A SCRAPER CONVEYOR** and having executed an application for Letters Patent of the United States of America describing the same and based thereon (U.S. Patent Application Serial No. 15/525,284, filed MAY 8, 2017), for good and valuable consideration, the receipt of which is hereby acknowledged from **CHINA UNIVERSITY OF MINING AND TECHNOLOGY** a Chinese University having its principal place of business at Science Academy of China University of Mining and Technology, No. 1 University Road, Xuzhou, Jiangsu, 221116 China (hereinafter called the Assignee), do hereby sell, assign and transfer unto the Assignee, its successors, and assigns my entire right, title, and interest, in and to said invention in the United States of America, including all rights, title and interest in the above-mentioned application and any divisional, continuing or reissue application or applications and any patent which may be issued on the said invention in the United States of America;

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IN WITNESS WHEREOF, I/we hereunto set my hand and seal on the day and year hereinafter noted.

Inventor's signature Guohua Cao Date 2017.5.5  
Full name: Guohua Cao

Witness: Tao Wang Witness: Wei Zhang  
Date: May 5, 2017 Date: 2017.5.5

**ASSIGNMENT**

I, Mingquan Qiu of Jiangsu, China, having invented certain inventions and improvements in **BREAKAGE DETECTION SYSTEM AND METHOD OF CHAINS OF A SCRAPER CONVEYOR** and having executed an application for Letters Patent of the United States of America describing the same and based thereon (U.S. Patent Application Serial No. 15525,284, filed MAY 8, 2017), for good and valuable consideration, the receipt of which is hereby acknowledged from **CHINA UNIVERSITY OF MINING AND TECHNOLOGY** a Chinese University having its principal place of business at Science Academy of China University of Mining and Technology, No. 1 University Road, Xuzhou, Jiangsu, 221116 China (hereinafter called the Assignee), do hereby sell, assign and transfer unto the Assignee, its successors, and assigns my entire right, title, and interest, in and to said invention in the United States of America, including all rights, title and interest in the above-mentioned application and any divisional, continuing or reissue application or applications and any patent which may be issued on the said invention in the United States of America;

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IN WITNESS WHEREOF, I/we hereunto set my hand and seal on the day and year hereinafter noted.

Inventor's signature Mingquan Qiu Date May 5, 2017  
Full name: Mingquan Qiu

Witness: Tao Wang Witness: Wei Zhang  
Date: May 5, 2017 Date: 2017.5.5

**ASSIGNMENT**

I, Yong Ren of Jiangsu, China, having invented certain inventions and improvements in **BREAKAGE DETECTION SYSTEM AND METHOD OF CHAINS OF A SCRAPER CONVEYOR** and having executed an application for Letters Patent of the United States of America describing the same and based thereon (U.S. Patent Application Serial No. 15/525,284, filed May 8, 2017), for good and valuable consideration, the receipt of which is hereby acknowledged from **CHINA UNIVERSITY OF MINING AND TECHNOLOGY** a Chinese University having its principal place of business at Science Academy of China University of Mining and Technology, No. 1 University Road, Xuzhou, Jiangsu, 221116 China (hereinafter called the Assignee), do hereby sell, assign and transfer unto the Assignee, its successors, and assigns my entire right, title, and interest, in and to said invention in the United States of America, including all rights, title and interest in the above-mentioned application and any divisional, continuing or reissue application or applications and any patent which may be issued on the said invention in the United States of America;

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IN WITNESS WHEREOF, I/we hereunto set my hand and seal on the day and year hereinafter noted.

Inventor's signature Yong Ren Date May 5, 2017  
Full name: Yong Ren

Witness: Tao Wang Witness: Wei Zhang  
Date: May 5, 2017 Date: 2017.5.5

**ASSIGNMENT**

I, Xing Zhang of Jiangsu, China, having invented certain inventions and improvements in **BREAKAGE DETECTION SYSTEM AND METHOD OF CHAINS OF A SCRAPER CONVEYOR** and having executed an application for Letters Patent of the United States of America describing the same and based thereon (U.S. Patent Application Serial No. 15/525,784, filed May 8, 2017), for good and valuable consideration, the receipt of which is hereby acknowledged from **CHINA UNIVERSITY OF MINING AND TECHNOLOGY** a Chinese University having its principal place of business at Science Academy of China University of Mining and Technology, No. 1 University Road, Xuzhou, Jiangsu, 221116 China (hereinafter called the Assignee), do hereby sell, assign and transfer unto the Assignee, its successors, and assigns my entire right, title, and interest, in and to said invention in the United States of America, including all rights, title and interest in the above-mentioned application and any divisional, continuing or reissue application or applications and any patent which may be issued on the said invention in the United States of America;

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IN WITNESS WHEREOF, I/we hereunto set my hand and seal on the day and year hereinafter noted.

Inventor's signature Xing Zhang Date May 5, 2017  
Full name: Xing Zhang

Witness: Tao Wang Witness: Wei Zhang  
Date: May 5, 2017 Date: 2017.5.5



**ASSIGNMENT**

I, Gongbo Zhou of Jiangsu, China, having invented certain inventions and improvements in **BREAKAGE DETECTION SYSTEM AND METHOD OF CHAINS OF A SCRAPER CONVEYOR** and having executed an application for Letters Patent of the United States of America describing the same and based thereon (U.S. Patent Application Serial No. 15/525,284, filed MAY 8, 2017), for good and valuable consideration, the receipt of which is hereby acknowledged from **CHINA UNIVERSITY OF MINING AND TECHNOLOGY** a Chinese University having its principal place of business at Science Academy of China University of Mining and Technology, No. 1 University Road, Xuzhou, Jiangsu, 221116 China (hereinafter called the Assignee), do hereby sell, assign and transfer unto the Assignee, its successors, and assigns my entire right, title, and interest, in and to said invention in the United States of America, including all rights, title and interest in the above-mentioned application and any divisional, continuing or reissue application or applications and any patent which may be issued on the said invention in the United States of America;

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IN WITNESS WHEREOF, I/we hereunto set my hand and seal on the day and year hereinafter noted.

Inventor's signature Gongbo Zhou Date May 5, 2017  
Full name: Gongbo Zhou

Witness: Tao Wang Witness: Wei Zhang  
Date: May 5, 2017 Date: 2017.5.5

**ASSIGNMENT**

I, Yuxing Peng of Jiangsu, China, having invented certain inventions and improvements in **BREAKAGE DETECTION SYSTEM AND METHOD OF CHAINS OF A SCRAPER CONVEYOR** and having executed an application for Letters Patent of the United States of America describing the same and based thereon (U.S. Patent Application Serial No. 151525,284, filed May 8, 2017), for good and valuable consideration, the receipt of which is hereby acknowledged from **CHINA UNIVERSITY OF MINING AND TECHNOLOGY** a Chinese University having its principal place of business at Science Academy of China University of Mining and Technology, No. 1 University Road, Xuzhou, Jiangsu, 221116 China (hereinafter called the Assignee), do hereby sell, assign and transfer unto the Assignee, its successors, and assigns my entire right, title, and interest, in and to said invention in the United States of America, including all rights, title and interest in the above-mentioned application and any divisional, continuing or reissue application or applications and any patent which may be issued on the said invention in the United States of America;

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IN WITNESS WHEREOF, I/we hereunto set my hand and seal on the day and year hereinafter noted.

Inventor's signature Yuxing Peng Date May 5, 2017  
Full name: Yuxing Peng

Witness: Tao Wang Witness: Wei Zhang  
Date: May 5, 2017 Date: 2017.5.5