

FORM PTO-1595  
(Rev. 6-93)

OMB No. 0651-0011 (exp. 4/94)

## RECORDATION FORM COVER SHEET

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark OfficePATENTS ONLY <sup>(3)</sup>

Tab settings ⇨ ⇨ ⇨ ▼

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Grove U.S. LLC

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:

☐ Assignment☐ Merger☒ Security Agreement☐ Change of Name☐ Other \_\_\_\_\_Execution Date: June 10, 2005

## 2. Name and address of receiving party(ies)

Name: JPMorgan Chase Bank, N.A., as agent

Internal Address: \_\_\_\_\_

Street Address: 131 S. DearbornCity: Chicago State: IL ZIP: 60670Additional name(s) & address(es) attached? ☐ Yes ☐ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached? ☒ Yes ☐ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Laura KonrathInternal Address: Winston & Strawn LLP33rd FloorStreet Address: 35 W. Wacker Dr.City: Chicago State: IL ZIP: 60601

## 6. Total number of applications and patents involved:

52

7. Total fee (37 CFR 3.41).....\$ 2,080☐ Enclosed☒ Authorized to be charged to deposit account

## 8. Deposit account number:

232428

(Attach duplicate copy of this page if paying by deposit account)

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## 9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Laura Konrath

Name of Person Signing

Signature

Date

Total number of pages including cover sheet, attachments, and document: 6/29/05Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

700191606

PATENT  
REEL: 016446 FRAME: 0082

CH \$2080.00 232428 09205295

Continuation  
SCHEDULE A Item

4

TITLE	PATENT NO.	ISSUE DATE
ANTI-TWO BLOCK DEVICE USING NON-CONTACT MEASURING AND DETECTING DEVICES	6,343,703	02/05/2002
AUTOMATIC LEVELING AND SYNCHRONIZATION SYSTEM FOR COUNTERWEIGHT REMOVAL AND INSTALLATION	6,050,430	04/18/2000
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IMPROVEMENTS IN AND RELATING TO TELESCOPIC BOOMS	5,731,987	03/24/1998
LIFT APPARATUS WITH FLOATING LIFT CYLINDER	6,267,200	07/31/2001
METHOD FOR A LIFTING APPARATUS WITH FLOATING LIFT CYLINDER ATTACHMENT (DIVISIONAL)	6,390,233	05/21/2002
LUFFING ANGLE MEASUREMENT SYSTEM	09/205,295 (App.)	12/04/1998 (App.)
METERING VALVE	5,911,239*	06/15/1999
METHOD AND APPARATUS FOR MEASURING THE LENGTH OF A MULTI-SECTION TELESCOPIC BOOM	5,877,693*	03/02/1999
METHOD OF AND APPARATUS FOR REMOVAL AND INSTALLATION OF OUTRIGGER BOX FOR CRANES	4,664,411*	05/12/1987

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TITLE	PATENT NO.	ISSUE DATE
METHOD OF REMOVAL OF OUTRIGGER BOX ON CRANES	4,731,916*	03/22/1988
MULTI-POSITION LOW PROFILE BOOM NOSE	6,186,346*	02/13/2001
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TELESCOPING SYSTEM WITH MULTIPLE SINGLE-STAGE TELESCOPIC CYLINDER	6,029,559*	02/29/2000
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TRANSPORTABLE CRANE (SKYRIDER)	5,704,498*	01/06/1998
WORK TRANSFER LOCK SYSTEM AND METHOD THEREOF	6,161,638*	12/19/2000
THERMAL CONTRACTION CONTROL APPARATUS FOR HYDRAULIC CYLINDERS	6,634,172	10/21/2003
STEERING SYSTEM FOR A MULTIPLE-AXLE VEHICLE	6,059,056	05/09/2000
SLIDE MOUNT FOR TELESCOPIC PARTS	6,108,985	08/29/2000
TELESCOPIC JIB BEARING ASSEMBLY WITH EMBOSSMENTS	6,086,256	07/11/2000
LATERAL JIB LOCKING DEVICE	6,216,895	04/17/2001
SHOCK ABSORBING LEG WITH TOP STEERING ATTACHMENT	6,227,338	05/08/2001
JIB POSITIONING WITH HYDRAULIC ADJUSTMENT CYLINDER	6,164,468	12/26/2000
COMPOSITE MATERIAL JIB	6,586,084	07/01/2003

CHI:1544158.3

33

TITLE	PATENT NO.	ISSUE DATE
LATERAL BOOM LOCKING AND ACTUATING UNIT	6,520,359	02/18/2003
JIB PIN ALIGNMENT JACK ASSEMBLY	5,673,805	10/07/1997
TELESCOPIC JIB FOR VEHICULAR CRANES	5,884,791	03/23/1999
DEVICE AND METHOD FOR ARRESTING SECTIONS OF TELESCOPIC JIB	6,062,404	05/16/2000
BRAKING SYSTEM WITH A LOGARITHMIC CHARACTERISTIC	6,041,896	03/28/2000
PROTECTIVE COATING ON STEEL PARTS	6,726,960	04/27/2004
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VEHICULAR CRANE OF HIGH CARRYING CAPACITY HAVING AN EXTENSIBLE ARM	4,555,031	11/26/1985
SHOCK ABSORBER FOR A VEHICLE	5,031,732	07/16/1991
SHOCK-ABSORBING STRUT FOR HYDRAULIC WHEEL-DRIVE UNIT	5,472,071	12/05/1995
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TELESCOPING CRANE ARM	5,465,855	11/14/1995
FORKLIFT TRUCK HAVING A TELESCOPIC AUXILIARY BOOM ARTICULATED TO A TELESCOPIC MAIN BOOM	4,964,778	10/23/1990
CARRIER TRACK SYSTEM FOR EXTENSIBLE AND RETRACTABLE BOOM MACHINES	4,789,120	12/06/1988

CHI:1544158.3

\* Licensed to TIL LIMITED to produce and sell crane products in India, Myanmar (Burma), Nepal and Bhutan.

CHI:1544138.3

3

GRANT OF SECURITY INTEREST  
IN UNITED STATES PATENTS

FOR GOOD AND VALUABLE CONSIDERATION, receipt and sufficiency of which are hereby acknowledged, Grove U.S. L.L.C., a Delaware limited liability company (the "Grantor"), with principal offices at 1565 Buchanan Trail East, Shady Grove, Pennsylvania 17256, hereby assigns and grants to JPMorgan Chase Bank, N.A., as Collateral Agent, with offices at 131 South Dearborn Street, Chicago, Illinois 60670 (the "Grantee"), a security interest in (i) all of the Assignor's rights, title and interest in and to the United States patents (the "Patents") set forth on Schedule A attached hereto, in each case together with (ii) all Proceeds (as such term is defined in the Security Agreement referred to below) and products of the Patents, and (iii) all causes of action arising prior to or after the date hereof for infringement of any of the Patents or unfair competition regarding the same.

THIS GRANT is made to secure the satisfactory performance and payment of all the Obligations of the Grantor, as such term is defined in the Security Agreement among the Grantor, the other assignors from time to time party thereto and the Grantee, dated as of June 10, 2005 (as amended, modified, restated and/or supplemented from time to time, the "Security Agreement"). Upon the occurrence of the Termination Date (as defined in the Security Agreement), the Grantee shall execute, acknowledge, and deliver to the Grantor an instrument in writing releasing the security interest in the Patents acquired under this Grant.

This Grant has been granted in conjunction with the security interest granted to the Grantee under the Security Agreement. The rights and remedies of the Grantee with respect to the security interest granted herein are as set forth in the Security Agreement, all terms and provisions of which are incorporated herein by reference. In the event that any provisions of this

Grant are deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall govern.

[Signature page follows]

IN WITNESS WHEREOF, the undersigned have executed this Grant as of the  
10<sup>th</sup> day of June, 2005.

GROVE U.S. L.L.C., as Grantor

By: Manitowoc Cranes, Inc.,  
as sole member and manager

By: 

Name:

Maurice D. Jones

Title:

Vice President & Secretary

JPMORGAN CHASE BANK, N.A.,  
as Collateral Agent and Grantee

By: \_\_\_\_\_

Name:

Title:

{Signature Page to Patent Security Agreement}



IN WITNESS WHEREOF, the undersigned have executed this Grant as of the  
6<sup>th</sup> day of June, 2005.

GROVE U.S. L.L.C., as Grantor

By: Manitowoc Cranes, Inc.,  
as sole member and manager

By: \_\_\_\_\_  
Name:  
Title:

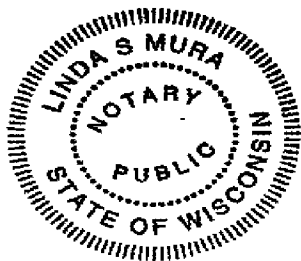
JPMORGAN CHASE BANK, N.A.,  
as Collateral Agent and Grantee

By: *[Signature]*  
Name: *Michelle Kelly*  
Title: *Vice President*

[Signature Page to Patent Security Agreement]

STATE OF WISCONSIN )  
 ) ss:  
COUNTY OF MANITOWOC )

On this 10<sup>th</sup> day of June, 2005, before me personally came Maurice D. Jones, who, being by me duly sworn, did state as follows: that [s]he is VP & SECRETARY of Manitowoc Cranes, Inc., acting as sole member of Grove U.S. L.L.C., and that [s]he is authorized to execute the foregoing Grant on behalf of said company.



Linda S. Mura  
Notary Public

SCHEDULE A

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ANTI-TWO BLOCK DEVICE USING NON-CONTACT MEASURING AND DETECTING DEVICES	6,343,703	02/05/2002
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CHI:1544158.3

\* Licensed to TIL LIMITED to produce and sell crane products in India, Myanmar (Burma), Nepal and Bhutan.

CHI:1944158.3

# WINSTON & STRAWN LLP

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312-558-5600

200 PARK AVENUE NEW YORK, NY 10166-4193 212-294-0700 1400 L STREET, N.W. WASHINGTON, DC 20005-3502 202-371-8700 39TH FLOOR, 333 SOUTH BRIDGE AVE. LOS ANGELES, CA 90071-1543 213-615-1700 101 CALIFORNIA STREET, SAN FRANCISCO CA 94111-5894 415-561-1000 43 RUE DU RHONE 1204 GENEVA, SWITZERLAND 41-22-3177575 21 AVENUE VICTOR HUGO 75110 PARIS, FRANCE 33-1-85-54-52-52 21 AVENUE VICTOR HUGO 3 QUEEN VICTORIA STREET LONDON, ENGLAND EC4N 8NH 44-020-7429-0000

Fax Number: 312-558-5700

FROM: Laura Konrath  
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DATE: 6/29/2005

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Total number of pages including this page: 16 pages

COMMENTS

**CONFIRMATION OF RECEIPT REQUESTED**

Enclosed: -Facsimile Cover Sheet  
-Cover Letter  
-Recordation Cover Sheet  
-Schedule of U.S. Patents  
-Grant of Security Interest in U.S. Patents

IF YOU DO NOT RECEIVE ALL THE PAGES, PLEASE CALL AS SOON AS POSSIBLE. THANK YOU.  
312-558-6352

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**WINSTON & STRAWN LLP**

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1700 K STREET, N.W.  
WASHINGTON, D.C. 20006-3817

WRITER'S DIRECT DIAL NUMBER

(312) 558-6352

June 29, 2005

**VIA TELECOPIER**

U.S. Patent & Trademark Office  
Assignment Division  
Box Assignments  
1213 Jefferson Davis Hwy.  
Suite 320  
Washington, DC 20231

**Re: Client #18103/325 - JPMorgan/Manitowoc/Grove**

Dear Commissioner:

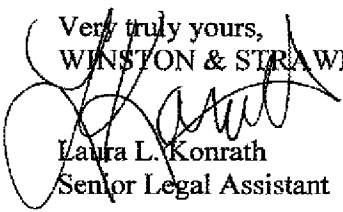
Enclosed is a Grant of Security Interest in U.S. Patents. Please file the enclosed with the Patent Assignment Department of the U.S. Patent and Trademark Office.

Please deduct \$2,080 from Deposit Account #232428. When the filing process is completed, please send the file-stamped document to:

Fax to Laura Konrath c/o Winston & Strawn (312) 558-5700 or send via email to [lkonrath@winston.com](mailto:lkonrath@winston.com)

Should you require any additional information, please do not hesitate to call.  
Thank you for your attention to this matter.

Very truly yours,  
WINSTON & STRAWN LLP

  
Laura L. Konrath  
Senior Legal Assistant

LLK:cl  
Enclosures