08-15-2002 **FORM PTO 1595** U.S. DEPARTMENT OF COMMERCE R (Rev. 6-93) Patent and Trademark Office B No. 0651-0011 (exp. 4/94) 102190553

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. OMB No. 0651-0011 (exp. 4/94) Name and address of receiving party(ies) Name(s) of conveying party(ies): Dickey-John Corporation U.S. Bank National Association 8.13.02 c/o TSI, Incorporated 333 South Seventh Street Internal Address: U.S. Bank Place – EP-MN-M6MM **Suite 3100** Street Address: 601 Second Avenue South Minneapolis, Minnesota 55402 City: Minneapolis State: Minnesota ZIP: 55402-4302 Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No Country: United States of America 3. Nature of conveyance: Additional name(s) & address(es) attached \(\subseteq \text{Yes} \) ☐ Assignment **⊠** No FICE ☐ Security Agreement ☐ Change of Name ☑ Other: Collateral Assignment Execution Date: June 28, 2002 4. Application number(s) or patent number(s): Please see Attachments 1 and 2 If this document is being filed together with a new application, the execution date of the application is: B. Patent No.(s) A. Patent Application No.(s) See Attachment 2 See Attachment 1 Additional numbers attached?

☐ Yes ☐ No 6. Total Number of applications and patents involved: 20 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Devan V. Padmanabhan ☐ Authorized to be charged to deposit account Internal Address: ___ DORSEY & WHITNEY LLP 8. Deposit Account number: 04-1420 Street Address: Suite 1500, 50 South Sixth Street (Attach duplicate copy of this page if paying by deposit account) City: Minneapolis State: MN ZIP 55402-1498 DO NOT USE THIS SPACE To the best of my knowledge and belief, the foregoing information is true and correct, and any attached copy 9. is a true copy of the original document. Devan V. Padmanabhan

Total number of pages including cover sheet, attachments, and document: 14

Mail documents to be recorded with required cover sheet information to:

08/14/2002 TDIAZ1 00000126 09090363

Name of Person Signing Reg. No. 38,262

> Commissioner of Patents & Trademarks, **BOX ASSIGNMENTS**

Washington, D.C. 20231

800.00 DP 01 RC:581

Attachment 1 to Recordal Cover Sheet Continuation of Item 4A

U.S. Patent Applications

TITLE	APPLICATION NUMBER	APPLICATION FILING DATE
Viscometer module with crystal	09/090,363	06-04-1998
Infrared reflective article	09/159,213	09-23-1998

Attachment 2 to Recordal Cover Sheet Continuation of Item 4B

U.S. Patents - Issued

PATENT NUMBER	ISSUE DATE
4,531,118	07-23-1985
4,551,801	11-05-1985
4,555,624	11-26-1985
4,633,252	12-30-1986
4,763,692	08-16-1988
4,803,626	02-07-1989
4,924,418	05-08-1990
4,967,957	11-06-1990
4,972,155	11-20-1990
5,082,097	01-21-1992
5,475,561	12-12-1995
	4,551,801 4,555,624 4,633,252 4,763,692 4,803,626 4,924,418 4,967,957 4,972,155 5,082,097

Page 2 of 3

PATENT TITLE	PATENT NUMBER	ISSUE DATE	
Apparatus and method for monitoring	5,635,911	06-03-1997	
Apparatus and method for sensing	5,770,865	06-23-1998	
Universal control system with alarm	5,801,948	09-01-1998	
Apparatus and method for sensing	5,819,512	10-13-1998	
Boom configuration monitoring	5,884,205	03-16-1999	
Universal modular control system	5,897,600	4-27-1999	
Control system for a mobile	5,911,362	06-15-1999	

COLLATERAL ASSIGNMENT (PATENTS)

(Subsidiary)

THIS COLLATERAL ASSIGNMENT (PATENTS) (the "Assignment"), dated as of June 28, 2002, is made and given by DICKEY-JOHN CORPORATION, a Delaware corporation (the "Assignor"), to U.S. BANK NATIONAL ASSOCIATION, a national banking association, as agent (in such capacity, and together with any successor in such capacity, the "Assignee") for the Banks party to the Credit Agreement described below.

RECITALS

- A. JJF Acquisition, Inc. ("JJF"), the Assignee as Agent and as a Bank, and certain other Banks (the "Banks") have entered into a Credit Agreement dated as of May 2, 2000 (as amended, supplemented, extended, restated, or otherwise modified from time to time, the "Credit Agreement") pursuant to which the Banks have agreed to extend certain credit accommodations to JJF under the terms and conditions set forth therein (all terms capitalized and used herein without being defined shall have the meaning given them in the Credit Agreement).
- B. On May 3, 2002, JJF merged with and into TSI, Incorporated ("TSI"), with TSI being the surviving entity.
- C. The Assignor is a wholly owned subsidiary of TSI, and executed a Guaranty of even date herewith (as amended, supplemented, extended, restated, or otherwise modified from time to time, the "Guaranty") to guaranty the obligations of TSI under the Credit Agreement.
- D. To secure all the liabilities and obligations of the Assignor to the Assignee and the Banks arising under the Guaranty, whether now existing or hereafter arising (the "Liabilities"), the Assignor has pledged and granted to the Assignee a security interest in the property described in a Security Agreement of even date herewith (the "Security Agreement") by and between Assignor and Assignee which property includes general intangibles, including, without limitation, patents, inventions, trademarks, trade names, copyrights and trade secrets.
- E. The Assignor owns the patents set forth in <u>Exhibit A</u> attached hereto, and the patents so listed are registered or application has been made for such registration as noted in <u>Exhibit A</u> in the United States Patent and Trademark Office.
- F. It is a condition precedent to the obligation of the Banks to extend credit accommodations pursuant to the terms of the Credit Agreement that this Assignment be executed and delivered by the Assignor.
- G. The Assignor finds it advantageous, desirable and in its best interests to comply with the requirement that it execute and deliver this Agreement to the Assignee.

NOW, THEREFORE, in consideration of the premises and to induce the Banks to extend credit accommodations under the Credit Agreement, the parties hereto agree as follows:

- The Assignor does hereby assign all of its right, title and interest in and to all of the present United States patents and the registrations and applications therefor owned by the Assignor together with inventions disclosed therein (the "Patents"), including but not limited to those set forth on Exhibit A, and including, without limitation, all proceeds thereof together with the right to recover for past, present and future infringements, all rights corresponding thereto throughout the world and all renewals and extensions thereof, said Patents to be held and enjoyed by the Assignee, for its own use and for use on behalf of the Banks, and for their legal representatives, successors and assigns, as fully and entirely as the same would have been held by the Assignor had this Assignment not been made. The foregoing assignment shall be effective only upon the occurrence of a Default or an Event of Default under the Credit Agreement and upon written notice by the Assignee to the Assignor of the acceptance by the Assignee of this Assignment, which written notice shall constitute conclusive proof of the matters set forth therein; unless and until the occurrence of such a Default or an Event of Default, such assignment shall have no effect. After the occurrence and continuation of an Event of Default under the Credit Agreement, the Assignee shall be entitled to transfer the Patents pursuant to the Assignment of Patents attached hereto as Exhibit B. Assignor hereby irrevocably authorizes the Assignee to complete the undated Assignments of Patents at the time of transfer.
 - 2. The Assignor hereby covenants and warrants that:
 - (a) except for applications pending, the Patents listed on Exhibit A have been duly issued and are registered and subsisting and have not been adjudged invalid or unenforceable in whole or in part;
 - (b) each of the Patents material to the conduct of Assignor's business listed on Exhibit A is valid and enforceable;
 - (c) no claim has been made to the Assignor or, to the knowledge of the Assignor, to any other person, that any of the Patents or use of the inventions described therein does or may violate the rights of any third person and no claim has been made by the Assignor that any other person is infringing upon the rights of the Assignor under the Patents:
 - (d) the Assignor has the unqualified right to enter into this Assignment and perform its terms;
 - (e) the Assignor will be, until the Liabilities shall have been satisfied in full and the Loan Documents shall have been terminated, in compliance with statutory notice requirements relating to the Patents;
 - (f) the Assignor is the sole and exclusive owner of the entire and unencumbered right, title and interest in and to each of the Patents listed on Exhibit A, free and clear of any liens, charges and encumbrances, including without limitation, licenses and covenants by the Assignor not to sue third persons;

- (g) the Patents listed on <u>Exhibit A</u> are all of the United States Patents and applications therefor now owned by the Assignor; and
- (h) the Assignor will, at any time upon request, communicate to the Assignee, its successors and assigns, any facts relating to the Patents or the history thereof as may be known to the Assignor or its officers, employees and agents, and cause such officers, employees and agents to testify as to the same in any infringement or other litigation at the request of the Assignee.
- 3. The Assignor agrees that, until the rights of the Assignee in the Patents are terminated pursuant to <u>Section 6</u>, it will not enter into any agreement that is in conflict with its obligations under this Assignment.
- 4. If, before the Liabilities shall have been satisfied in full, the Assignor shall obtain rights to any new patent, or become entitled to the benefit of any patent application, registration or any renewal or extension of any patent registration, such shall be included in the definition of "Patents" (except for purposes of Section 2 hereof) as used in this Assignment, Section 1 hereof shall automatically apply thereto, and the Assignor shall give to the Assignee prompt notice thereof in writing. The Assignor authorizes the Assignee to modify this Assignment by amending Exhibit A to include any future patent.
- 5. Except as permitted by the Credit Agreement, the Assignor agrees not to sell, assign or encumber its interest in, or grant any license with respect to, any of the Patents, except for the licenses listed on Exhibit C attached hereto.
- 6. The Assignor agrees that it will authorize, execute and deliver to Assignee all documents requested by Assignee to facilitate the purposes of this Assignment, including, but not limited to, documents required to record Assignee's interest in any appropriate office in any domestic or foreign jurisdiction. At such time as the Credit Agreement, the Guaranty and the other Loan Documents shall have been terminated in accordance with their terms, the Assignee shall on demand of the Assignor execute and deliver to the Assignor all termination statements and other instruments as may be necessary or proper to terminate this Assignment and assign to the Assignor all the Assignee's rights in the Patents, subject to any disposition thereof which may have been made by the Assignee pursuant hereto or pursuant to the Credit Agreement or any Loan Documents, as defined therein.
- 7. The Assignor shall have the duty, through counsel reasonably acceptable to the Assignee, (i) to prosecute diligently any pending Patent application as of the date of this Assignment or thereafter until the Credit Agreement, the Guaranty and the Loan Documents shall have been terminated in accordance with their terms, and (ii) to preserve and maintain all rights in all Patents which a prudent person would reasonably preserve and maintain. Any expenses incurred in connection with applications that constitute Patents shall be borne by the Assignor. The Assignor shall not abandon any application presently pending that constitutes a Patent without the written consent of the Assignee.
- 8. The Assignee shall have the right but shall in no way be obligated to bring suit in its own name to enforce or to defend the Patents and any license thereunder if the Assignor has

failed to bring such suit in circumstances in which a prudent person would have brought such suit. The Assignor shall at the request of the Assignee do any and all lawful acts and execute any and all proper documents required by the Assignee in aid of such enforcement or defense (including, without limitation, participation as a plaintiff or defendant in any proceeding) and, if Assignor has failed to bring such suit in circumstances in which a prudent person would have brought such suit, the Assignor shall promptly, upon demand, reimburse and indemnify the Assignee for all reasonable costs and expenses incurred by the Assignee in the exercise of its rights under this Section.

- 9. This Assignment shall also serve to evidence the security interest in the Patents granted by the Assignor to the Assignee pursuant to the Security Agreement. Nothing in this Assignment shall be construed to limit such security interest in the Patents.
- 10. No course of dealing between the Assignor and the Assignee, failure to exercise, nor any delay in exercising, on the part of the Assignee, with respect to any right, power or privilege hereunder shall operate as a waiver thereof; nor shall any single or partial exercise of any right, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, power or privilege.
- 11. All of the Assignee's rights and remedies with respect to the Patents, whether established hereby, by any other agreements or by law shall be cumulative and may be exercised singularly or concurrently.
- 12. This Assignment is subject to modification only by a writing signed by the parties, except as provided in <u>Section 4</u> hereof.
- 13. This Assignment shall inure to the benefit of and be binding upon the respective successors and permitted assigns of the parties.
- 14. Upon payment in full of all Liabilities (other than Assignor's unmatured indemnity obligations under any Loan Document) and the expiration of any obligation of the Assignee to extend credit accommodations to the Assignor, this Assignment shall terminate and all rights to the Patents shall revert to the Assignor.
- 15. THIS ASSIGNMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE CONSTRUED IN ACCORDANCE WITH AND GOVERNED BY THE LAWS (WITHOUT GIVING EFFECT TO THE CONFLICTS OF LAW PRINCIPLES THEREOF) OF (I) THE UNITED STATES OF AMERICA AS TO RIGHTS AND INTERESTS HEREUNDER WHICH ARE REGISTERED OR FOR THE REGISTRATION OF WHICH APPLICATION IS PENDING WITH THE UNITED STATES PATENT AND TRADEMARK OFFICE AND (II) THE STATE OF MINNESOTA IN ALL OTHER RESPECTS. WHENEVER POSSIBLE, EACH PROVISION OF THIS ASSIGNMENT AND ANY OTHER STATEMENT, INSTRUMENT OR TRANSACTION CONTEMPLATED HEREBY OR RELATING HERETO SHALL BE INTERPRETED IN SUCH MANNER AS TO BE EFFECTIVE AND VALID UNDER APPLICABLE LAW, BUT IF ANY PROVISION OF THIS ASSIGNMENT OR ANY OTHER STATEMENT, INSTRUMENT OR TRANSACTION CONTEMPLATED HEREBY OR RELATING

HERETO SHALL BE HELD TO BE PROHIBITED OR INVALID UNDER APPLICABLE LAW, SUCH PROVISION SHALL BE INEFFECTIVE ONLY TO THE EXTENT OF SUCH PROHIBITION OR INVALIDITY, WITHOUT INVALIDATING THE REMAINDER OF SUCH PROVISION OR THE REMAINING PROVISIONS OF THIS ASSIGNMENT OR ANY OTHER STATEMENT, INSTRUMENT OR TRANSACTION CONTEMPLATED HEREBY OR RELATING HERETO. IN THE EVENT OF ANY CONFLICT WITHIN, BETWEEN OR AMONG THE PROVISIONS OF THIS ASSIGNMENT, ANY OTHER LOAN DOCUMENT OR ANY OTHER STATEMENT, INSTRUMENT OR TRANSACTION CONTEMPLATED HEREBY OR THEREBY OR RELATING HERETO OR THERETO, THOSE PROVISIONS GIVING THE ASSIGNEE THE GREATER RIGHT SHALL GOVERN.

[The remainder of this page is intentionally left blank.]

IN WITNESS WHEREOF, the Assignor has executed this instrument as of the date first above written.

DICKEY-JOHN CORPORATION

Its TREASURER

Address:

DICKEY-john Corporation c/o TSI Incorporated 333 South 7th Street Suite 3100 Minneapolis, Minnesota 55402 Fax (612) 673-6703

Address for Assignee:

U.S. Bank National Association U.S. Bank Place - EP - MN - M6MM 601 Second Avenue South Minneapolis, Minnesota 55402-4302 Fax (612) 973-0823

EXHIBIT A TO COLLATERAL ASSIGNMENT (PATENTS)

UNITED STATES PATENTS

PENDING PATENT APPLICATIONS

Country	Application No.	Application Filing Date	Title	Status
USA	09/090363	04 June 1998	Viscometer module with crystal	Pending
USA	09/159213	23 September 1998	Infrared reflective article	Pending

ACTIVE ISSUED PATENTS

Country	Patent No.	Issue Date	Title/Description
USA	4531118	23 July 1985	Metal detector
USA	4551801	05 November 1985	Modular vehicular monitoring system
USA	4555624	26 November 1985	High rate seed sensor
USA	4633252	30 December 1986	Radar velocity sensor
USA	4763692	16 August 1988	Rotary valve structure
USA	4803626	07 February 1989	Universal controller for material
USA	4924418	08 May 1990	Universal monitor
USA	4967957	06 November 1990	Injection mixer
USA	4972155	20 November 1990	Moisture tester
USA	5082097	21 January 1992	Transmission controller
USA	5475561	12 December 1995	Solenoid circuit
USA	5635911	03 June 1997	Apparatus and method for monitoring
USA	5770865	23 June 1998	Apparatus and method for sensing
USA	5801948	01 September 1998	Universal control system with alarm
USA	5819512	13 October 1998	Apparatus and method for sensing
USA	5884205	16 March 1999	Boom configuration monitoring
USA	5897600	27 April 1999	Universal modular control system
USA	5911362	15 June 1999	Control system for a mobile

ASSIGNMENT OF PATENTS

WHEREAS, DICKEY-john Corporation, a Delaware corporation (hereinafter "Assignor"), is the owner by assignment of the entire right, title and interest in and to certain United States Letters Patent, together with the invention(s) disclosed therein.

WHEREAS, ________ (hereinafter "Assignee"), is desirous of acquiring the entire right, title, and interest in and to the aforesaid Letters Patent, together with the invention(s) disclosed therein, any and all causes of action and rights of recovery for past infringements of said Letters Patent, and all of the rights vested in said Assignor herein by virtue of the instruments of assignment and/or by virtue of other instruments pursuant to which Assignor became vested with said ownership, including the right, title, and interest in and to any and all improvements acquired pursuant to the terms of said instruments of assignment.

NOW, THEREFORE, for good and valuable consideration received by Assignor from Assignee, the receipt in full of which is hereby acknowledged.

- 1. Said Assignor hereby sells, assigns, transfers and conveys unto said Assignee the entire right, title and interest in and to said Letters Patent of the United States together with the invention(s) disclosed therein, including each and every Letters Patent which is granted on any application which is a division, substitution or continuation of said Letters Patent, and in and to each and every reissue or extension of said Letters Patent.
- 2. Said Assignor further sells, assigns, transfers and conveys unto said Assignee the entire right, title and interest in and to any and all causes of action and rights of recovery for past infringement of the Letters Patent herein assigned.
- 3. The terms, covenants and provisions of this Assignment shall inure to the benefit of Assignee, its successors, assigns, and/or legal representatives, and shall be binding upon said Assignor, its successors, assigns and/or other legal representatives.
- 4. Said Assignor hereby irrevocably authorizes U.S. Bank National Association or any successor collateral agent to date this undated Assignment and otherwise complete this Assignment at the time of transfer.

IN WITNESS WHEREOF, said _		, has executed and delivered	
this instrument this	day of	·	
		DICKEY-JOHN CORPORATION	
		By	

EXHIBIT C TO COLLATERAL ASSIGNMENT (PATENTS)

LICENSES

Patent No.	Licensee	Licensor	Date of License Agreement	Date of License Expiration
5,201,215	DICKEY-john Corporation	Sandia Corporation	22 October 1996	1 January 2016
Application No. 08/108397	DICKEY-john Corporation	Sandia Corporation	22 October 1996	1 January 2016
5,416,448	DICKEY-john Corporation	Sandia Corporation	22 October 1996	1 January 2016
4972155	Elaine, Inc.	DICKEY-john Corporation	2 June 1997	31 December 2002

PATENT
RECORDED: 08/13/2002 REEL: 013177 FRAME: 0692