

## PATENT ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

EPAS ID: PAT6351279

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JULIA H. JENKS	10/11/2020
PRASANNA M. BALLAL	10/02/2020
SHAWN M. DAMM	10/13/2020
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	CATERPILLAR INC.
<b>Street Address:</b>	100 NE ADAMS STREET
<b>City:</b>	PEORIA
<b>State/Country:</b>	ILLINOIS
<b>Postal Code:</b>	61629-9510
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	17071057
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(707)736-9219
<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>	2028083550
<b>Email:</b>	cgilman@bomcip.com
<b>Correspondent Name:</b>	BOOKOFF MCANDREWS, PLLC
<b>Address Line 1:</b>	2020 K STREET, N.W.
<b>Address Line 2:</b>	SUITE 400
<b>Address Line 4:</b>	WASHINGTON, D.C. 20006
<b>ATTORNEY DOCKET NUMBER:</b>	00152-2503-00000
<b>NAME OF SUBMITTER:</b>	PETER T. HRUBIEC
<b>SIGNATURE:</b>	/Peter T. Hrubiec/
<b>DATE SIGNED:</b>	10/15/2020
<b>Total Attachments: 4</b>	
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## ASSIGNMENT

WHEREAS We, the below named inventor(s), hereinafter referred to as Assignor(s), have made an invention entitled:

### SYSTEMS AND METHODS FOR REVERSE FLOW DETECTION

for which We will or have filed a patent application; and

WHEREAS, **Caterpillar Inc.**, a corporation of **Delaware** whose post office address is **100 NE Adams Street, Peoria, Illinois 61629-9510, U.S.A.** (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention, and in and to the patent application for this invention and any and all patents to be issued upon this application throughout the world;


NOW THEREFORE, be it known that for good and valuable consideration the receipt of which from Assignee is hereby acknowledged, We, as Assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, our entire right, title, and interest in and to this invention, and this application, and all divisions, and continuations thereof, and all patents which may be granted thereon, and all reissues thereof, as well as all rights to claim priority in any country or jurisdiction or patent office on the basis of this application, and all applications for patents which may hereafter be filed for this invention in any country or jurisdiction or patent office and all patents which may be granted on this invention in any country or jurisdiction or patent office, and all extensions, renewals, and reissues thereof; and We hereby authorize and request any official of any country or jurisdiction or patent office whose duty it is to issue patents on applications as described above, to issue all patents for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, WE HEREBY covenant that We have the full right to convey the interest assigned by this Assignment, and We have not executed and will not execute any agreement in conflict with this Assignment;

AND, WE HEREBY further covenant and agree that We will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in any country or jurisdiction or patent office, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns;

AND, WE HEREBY authorize the attorneys/representatives that WE have empowered to prosecute this application to insert here in parentheses the country, application number, and official filing date ( U.S.  
Application No. 17/071,057, filed October 15, 2020).

IN TESTIMONY WHEREOF, We have hereunto set our hands.

1. FULL NAME OF FIRST ASSIGNOR <b>Julia H. JENKS</b>	ASSIGNOR'S SIGNATURE 	DATE <b>10/11/2020</b>
ADDRESS <b>7014 N Water Oak Drive</b>		CITIZENSHIP <b>U.S.</b>
<b>Edwards, IL 61528, U.S.A.</b>		

1. WITNESS NAME Scott Brown	WITNESS SIGNATURE <i>Scott Brown</i>	DATE 10/11/2020
ADDRESS 7014 N Water Oak Dr.		CITIZENSHIP U.S.
Edwards, IL 61528		

2. WITNESS NAME Ethan Banducci	WITNESS SIGNATURE <i>Ethan Banducci</i>	DATE 10/13/2020
ADDRESS 7014 N Water Oak Dr.		CITIZENSHIP U.S.
Edwards, IL 61528		

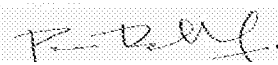
2. FULL NAME OF SECOND ASSIGNOR Prasanna M. BALLAL	ASSIGNOR'S SIGNATURE	DATE
ADDRESS 2122 W Broadland Drive		CITIZENSHIP U.S.
Dunlap, IL 61525, U.S.A.		


1. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP

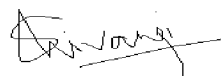
2. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP

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ADDRESS		CITIZENSHIP

2. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP

2. FULL NAME OF SECOND ASSIGNOR	ASSIGNOR'S SIGNATURE	DATE
Prasanna M. BALLAL		10/2/2020
ADDRESS		CITIZENSHIP
2122 W Broadland Drive		India
Dunlap, IL 61525, U.S.A.		

1. WITNESS NAME	WITNESS SIGNATURE	DATE
Karthik Jayasankaran		10/2/2020
ADDRESS		CITIZENSHIP
10723 N Glenfield Drive, Dunlap IL 61525, USA		India

2. WITNESS NAME	WITNESS SIGNATURE	DATE
SHIVANGI WAGLE		10/02/2020
ADDRESS		CITIZENSHIP
2206 W. Kenfield Ct		India
Peoria IL- 61615, USA		

3. FULL NAME OF THIRD ASSIGNOR Shawn M. DAMM	ASSIGNOR'S SIGNATURE <i>Shawn M Damm</i>	DATE 13-Oct-20
ADDRESS 6204 N Fieldtree Ct. Peoria, IL 61615, U.S.A.		CITIZENSHIP U.S.

1. WITNESS NAME Kosha B. Patel	WITNESS SIGNATURE <i>Kosha</i>	DATE 10/13/2020
ADDRESS 5828 N Lindenwood Dr, Apt 2310 Peoria, IL 61615		CITIZENSHIP U.S.A.

2. WITNESS NAME SHIVANGI WAGLE	WITNESS SIGNATURE <i>Shivangi</i>	DATE 10/13/2020
ADDRESS 2206 W. Kenfield Ct. Peoria IL -61615		CITIZENSHIP INDIA