

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT2618172

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>GIBSON V BARBEE</td> <td>09/23/2009</td> </tr> <tr> <td>GERHARD A THELEN</td> <td>09/16/2009</td> </tr> <tr> <td>ROBERT S RUNYON</td> <td>09/23/2009</td> </tr> <tr> <td>DERICK VANDER KLIPPE</td> <td>01/11/2010</td> </tr> </tbody> </table>		Name	Execution Date	GIBSON V BARBEE	09/23/2009	GERHARD A THELEN	09/16/2009	ROBERT S RUNYON	09/23/2009	DERICK VANDER KLIPPE	01/11/2010
Name	Execution Date										
GIBSON V BARBEE	09/23/2009										
GERHARD A THELEN	09/16/2009										
ROBERT S RUNYON	09/23/2009										
DERICK VANDER KLIPPE	01/11/2010										
RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>NORFOLK SOUTHERN CORPORATION</td> </tr> <tr> <td>Street Address:</td> <td>THREE COMMERCIAL PLACE</td> </tr> <tr> <td>City:</td> <td>NORFOLK</td> </tr> <tr> <td>State/Country:</td> <td>VIRGINIA</td> </tr> <tr> <td>Postal Code:</td> <td>23510</td> </tr> </table>		Name:	NORFOLK SOUTHERN CORPORATION	Street Address:	THREE COMMERCIAL PLACE	City:	NORFOLK	State/Country:	VIRGINIA	Postal Code:	23510
Name:	NORFOLK SOUTHERN CORPORATION										
Street Address:	THREE COMMERCIAL PLACE										
City:	NORFOLK										
State/Country:	VIRGINIA										
Postal Code:	23510										
PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13731541</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13731541						
Property Type	Number										
Application Number:	13731541										
CORRESPONDENCE DATA											
<p>Fax Number: (202)346-4444</p> <p>Phone: 2023464000</p> <p>Email: patendc@goodwinprocter.com</p> <p><i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i></p> <p>Correspondent Name: GOODWIN PROCTER LLP</p> <p>Address Line 1: 901 NEW YORK AVENUE NW</p> <p>Address Line 4: WASHINGTON, DISTRICT OF COLUMBIA 20001</p>											
ATTORNEY DOCKET NUMBER:	NOR-001-CIP										
NAME OF SUBMITTER:	CE LI										
Signature:	/Ce Li/										

Date:

11/18/2013

Total Attachments: 2

source=Assignment#page1.tif

source=Assignment#page2.tif

PATEL
FOR Jt(202) 346 4444
Charles L.

MENT

OUR REF: 124898-191228 (NOR-001)

WHEREAS, (1) Gibson V. Barbee, residing at 8501 Bent Mountain Road, Roanoke, VA 24018 and who is a citizen of the United States of America; (2) Gerhard A. Thelen, residing at 1813 Green Hill Road, Virginia Beach, VA 23454 and who is a citizen of the United States of America; (3) Robert S. Runyon, residing at 8270 Olde Tavern Road, Roanoke, VA 24019 and who is a citizen of the United States of America, and (4) Derick Vander Klippe, residing at 40 Pioneer Way, Cambridge, ON N1R 5S7, Canada and who is a citizen of Canada; ("Assignors"), as joint inventors have invented certain improvements in **BATTERY-POWERED ALL-ELECTRIC LOCOMOTIVE AND RELATED LOCOMOTIVE AND TRAIN CONFIGURATIONS** for which an application for United States Letters Patent was filed on May 1, 2009, and assigned Ser. No. 12/434,393; and

WHEREAS, Norfolk Southern Corporation ("Assignee"), a Corporation organized under the laws of the Commonwealth of Virginia and having a principal place of business at Three Commercial Place, Norfolk VA 23510-9241270, is desirous of acquiring all right, title and interest in and to said invention and any Patent that may be granted therefrom.

NOW, THEREFORE, in consideration of (a) the mutual promises made in the Purchase Order between Assignee and TMV Control Systems Inc. dated March 30, 2009, as modified by a letter agreement dated June 29, 2009, and (b) other good and valuable consideration, the receipt of which is hereby acknowledged, Assignors hereby sell, assign and set over to said Assignee (subject to the aforementioned Purchase Order as modified) the entire right, title and interest for the United States and all other countries in and to said invention and the aforesaid application for Patent, all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefrom in the United States and all other countries, including all rights associated with any previous provisional application upon which the above-identified application is based on and to which it asserts priority, and including all rights of priority from the filing of said application, and all rights for past infringement, and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said inventions or resulting therefrom to said Assignee herein, as Assignee of said interest therein; and the undersigned for themselves and their legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all divisional, continuation, reissue and other applications for Patent on said inventions and all assignments

thereof to said Assignee or its assigns, to communicate to said Assignee or its representatives all facts known to the undersigned respecting said inventions, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to assist Assignee, its successors, assigns and nominees to obtain patent protection for said invention in the United States and all other countries, the expenses incident to said applications to be borne and paid by said Assignee.

9/23/09
Date

Gibson V. Barbee
Gibson V. Barbee

9/16/09
Date

Gerhard A. Thelen
Gerhard A. Thelen

9-23-09
Date

Robert S. Runyon
Robert S. Runyon

Jan / 11 / 2010
Date

Derick Vander Klippe
Derick Vander Klippe