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PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

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

Name:	Norfolk Southern Corporation	
Street Address:	Three Commercial Place	
City:	Norfolk	
State/Country:	VIRGINIA	
Postal Code:	23510	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13411843

CORRESPONDENCE DATA

Fax Number: (202)346-4444 Phone: 202.346.4000

Email: danderson@goodwinprocter.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US

Mail.

Correspondent Name: Charles Li

Address Line 1: Goodwin Procter LLP
Address Line 2: 901 New York Avenue, N.W

Address Line 4: Washington, DISTRICT OF COLUMBIA 20001

ATTORNEY DOCKET NUMBER:	NOR-001 C1
NAME OF SUBMITTER:	Ce Li

Total Attachments: 2

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PATENT REEL: 027806 FRAME: 0535 OP \$40.00 13411843

PATEI Charle Li MENT OUR REF: 124898-191228 (NOR-001)
FOR JI

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

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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.

Jan /11 /2010

Date

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RECORDED: 03/05/2012