503003404 10/02/2014

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:	ASSIGNMENT		

CONVEYING PARTY DATA

Name	Execution Date
HAYDEN W. NEWELL	03/21/2011

RECEIVING PARTY DATA

Name:	NORFOLK SOUTHERN CORPORATION		
Street Address:	3 COMMERCIAL PLACE		
City:	NORFOLK		
State/Country:	VIRGINIA		
Postal Code:	23510		

PROPERTY NUMBERS Total: 1

Property Type	Number			
Application Number:	14178873			

CORRESPONDENCE DATA

Fax Number: (202)346-4444

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.

Phone: 2023464000

Email: patentdc@goodwinprocter.com
Correspondent Name: GOODWIN PROCTER LLP
Address Line 1: 901 NEW YORK AVENUE, NW
Address Line 4: WASHINGTON, D.C. 20001

ATTORNEY DOCKET NUMBER:	NOR-005-D1		
NAME OF SUBMITTER:	CE LI		
SIGNATURE:	/Ce Li/		
DATE SIGNED:	10/02/2014		

Total Attachments: 2

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PATENT 503003404 REEL: 033875 FRAME: 0283

ATTORNEY DOCKET NO.: NOR-005 (124898/198028)

ASSIGNMENT

WHEREAS, I/We, Hayden W. Newell, residing at 8793 Wild Turkey Road, Boones Mill, VA 24065-1831, have invented certain new and useful improvements in and to the subject matter of:

IMPROVED RAILROAD SPIKES AND METHODS OF MAKING THE SAME

described in an application for United States Letters Patent, filed on March 23, 2011, and accorded Application No. 13/069,883

AND, WHEREAS, Norfolk Southern Corporation, organized under the laws of the Commonwealth of Virginia, having a place of business located at 3 Commercial Place, Norfolk, Virginia 23510, USA (hereinafter "ASSIGNEE"), is desirous of acquiring certain rights to the improvements and under the application;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) or the equivalent thereof, and other good and valuable consideration, receipt of which is hereby acknowledged, we do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto in and to said improvements, said United States application, any other United States applications, including provisional, divisional, renewal, substitute, continuation, reexamination and reissue applications, based in whole or in part on said United States application or in whole or in part on said improvements, any foreign applications, including international and regional applications, based in whole or in part on any of the aforesaid United States applications or in whole or in part on said improvements, and in and to any and all letters patent, including extensions thereof, of any country which have been or may be granted on any of the aforesaid applications or on said improvements or any parts thereof;

AND WE hereby authorize and request our agents, Goodwin Procter LLP, whose address is 901 New York Ave., N.W.; Washington, DC 20001, to insert hereon any identification necessary or desirable for recordation of this document, including the filing date and application number of said application when known.

AND WE hereby agree for ourselves and our heirs, executors and administrators to execute without further consideration any further documents and instruments which may be necessary, lawful and proper in the prosecution of said above-referenced application or in the preparation or prosecution of any continuing, substitute, divisional, renewal, reexamination or reissue application or in any amendments, extensions or interference proceedings, or other applications for patents of any region or country, that may be necessary to secure to ASSIGNEE its interest and title in and to said improvements or any parts thereof, and in and to said several patents or any of them;

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(SEAL)

RECORDED: 10/02/2014

ATTORNEY DOCKET NO.: NOR-005 (124898/198028)

AND WE hereby covenant for ourselves and our legal representatives, and agree with said ASSIGNEE, its successors and assigns, that we have granted no right or license to make, use, sell or offer to sell said improvements, to anyone except said ASSIGNEE, that prior to the execution of this deed, our right, title and interest in said improvements had not been otherwise encumbered, and that we have not and will not execute any instrument in conflict therewith;

AND WE do hereby authorize and request the Director of the United States Patent and Trademark Office to issue any and all letters patent which may be granted upon said United States applications, or upon said improvements or any parts thereof when granted, to said ASSIGNEE.

IN WITNESS WHEREOF, we have hereunto set our hands and seals.

3/21/. Date	1 2011	_			Hayden W. Newell	1	W. Newell
County of)				
State of)	ss:			
known and k	for the Conown to n	unty and S ne to be th	tate af	fore on	said, personally appe	eare sign	, 2014, before me a Notary ed Hayden W. Newell, to me ned and sealed the foregoing ed.
					Dr	T	Turs australius Sourie

Notary Public

My Commission Expires 12 3 | 13

GOODWIN|PROCTER LLP INTELLECTUAL PROPERTY DEPARTMENT 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001 (202) 346-4000 (TELEPHONE) (202) 346-4444 (PACSIMILE)

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