PATENT ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

EPAS ID: PAT7821816

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
LOCKHEED MARTIN CORPORATION	09/29/2022

RECEIVING PARTY DATA

Name:	AUSTRALIAN RAIL TRACK CORPORATION LIMITED
Street Address:	LEVEL 3, 1 RICHMOND ROAD
Internal Address:	SA
City:	KESWICK
State/Country:	AUSTRALIA
Postal Code:	5034

PROPERTY NUMBERS Total: 22

Property Type	Number
Patent Number:	6641090
Patent Number:	7209810
Patent Number:	7610152
Patent Number:	8009435
Patent Number:	8090486
Patent Number:	8140201
Patent Number:	8069367
Patent Number:	7832691
Patent Number:	8073581
Patent Number:	8295999
Patent Number:	8244456
Patent Number:	8457148
Patent Number:	8250535
Patent Number:	8126934
Patent Number:	8392103
Patent Number:	8328143
Patent Number:	8565945
Patent Number:	8688297
Patent Number:	8918237

Property Type	Number
Patent Number:	9174657
Patent Number:	10000222
Patent Number:	10012736

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	8008-6632
NAME OF SUBMITTER:	DIALLO T. CRENSHAW
SIGNATURE:	/ Diallo T. Crenshaw /
DATE SIGNED:	02/28/2023

Total Attachments: 7
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Patent Assignment Deed

THIS PATENT ASSIGNMENT DEED (this "Patent Assignment") is made and entered into as of [•] ("Effective Date") by and between Lockheed Martin Corporation, a Maryland corporation ("Assignor"), and Australian Rail Track Corporation Limited (ABN 75 081 455 754), an Australian corporation ("Assignee").

WHEREAS, Lockheed Martin Australia Pty Ltd (an Australian related body corporate of the Assignor) and the Assignee are party to that certain Asset Sale and Transfer Agreement dated August 12, 2022 (the "Transfer Agreement"); and

WHEREAS, pursuant to the Transfer Agreement, Lockheed Martin Australia Pty Ltd agreed to procure that the Assignor convey, transfer, and assign to Assignee and Assignee agreed to acquire from Assignor Group (being the the Assignor, together with its related bodies corporate) certain intellectual property rights of Assignor Group, and Lockheed Martin Australia Pty Ltd agreed to procure Assignor to execute and deliver this Patent Assignment;

NOW, THEREFORE, the parties hereto agree as follows:

1. Assignment. Assignor hereby irrevocably sells, assigns, transfers and conveys to Assignee, and Assignee hereby accepts from Assignor: (a) all of Assignor's right, title and interest in and to the patents and patent applications identified on Schedule A attached hereto and all issuances, divisions, continuations, continuations-in-part, reissues, extensions, reexaminations and renewals thereof, together with all rights of any kind of Assignor accruing under any of the foregoing (including the inventions which are the subject of the patents) are being assigned that are provided by the applicable law of any jurisdiction (collectively, the "Assigned Patent Rights"); (b) the right to collect royalties, fees, income, payments and other proceeds now or hereafter due or payable with respect to the Assigned Patent Rights; and (c) the right to sue for and collect damages for past, present and future infringement, misappropriation, misuse or violation of the Assigned Patent Rights, in each case to have and to hold the same for Assignee's own use and enjoyment and for the use and enjoyment of its successors and assigns, for the full term or terms of all such Assigned Patent Rights.

2. Recordation and Further Action. Assignor hereby authorizes the Commissioner for Patents in the United States Patent and Trademark Office and the officials of corresponding entities or agencies in any applicable jurisdictions (including without limitation Australia and the United States) to record and register this Patent Assignment upon request by Assignee. During the six (6) month period immediately following the Effective Date, upon Assignee's request and at Assignee's sole cost and expense, Assignor shall execute and deliver any affidavits, declarations, oaths, exhibits, assignments, powers of attorney, or other documents as may be necessary to effect or perfect the assignment of the Assigned Patent Rights to Assignee, or any assignee or successor thereto.

3. Miscellaneous. This Patent Assignment, together with the Transfer Agreement (and the agreements referred to therein), constitutes the entire understanding of the parties with respect to the subject matter hereof and may not be modified, altered, amended or changed except in writing signed by both parties hereto. This Patent Assignment may be executed in any number of

counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. The captions herein are included for convenience of reference only and shall be ignored in the construction or interpretation hereof. This Patent Assignment shall be governed by and construed in accordance with the laws of the State of Delaware (without regard to the choice of law provisions thereof).

[Signature page follows.]

IN WITNESS WHEREOF, Assignor and Assignee have caused this Patent Assignment to be signed, sealed and delivered by their duly authorized representatives as of the Effective Date.

Executed as a deed.

Signed, sealed and delivered by **Lockheed Martin Corporation** in the presence of:

Anthony Ramirez
NOTARY PUBLIC
REG. #7913674
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES November 30, 2025
Seal

Signature of witness

Signature of authorised signatory

Anthony Ramirez
Name of witness (print)

Barbara A. Fisher
Name of authorised signatory (print)

Executed by **Australian Rail Track Corporation Limited** ABN 75 081 455 754 in accordance with section 127 of the Corporations Act 2001 (Cth):

DocuSigned by:
Mark E Campbell
D6C9334FAA80406...

Signature of Director

DocuSigned by:
Gavin Carney
8050EC88EB7A4D5...

Signature of Secretary

Mark E Campbell

Full name of Director who states that they are a director of Australian Rail Track Corporation Limited

Date 29 September 2022

Gavin Carney

Full name of Secretary who states that they are a Secretary of Australian Rail Track Corporation Limited

Date 29 September 2022

Schedule A

Title	Country	Patent or Application Number
Train Location System and Method	US	6,641,090
Locomotive Location System and Method	US	7,209,810
Train Navigator with Integral Constrained GPS Solution and Track Database Compensation	US	7,610,152
Locomotive/Train Navigation System and Method	US	7,650,207
Card Level Enclosure System Having Enhanced Thermal Transfer and Improved EMI Characteristics	US	8,009,435
Message Protocol for Efficient Transmission of Vital Directives on a Guideway	US	8,090,486
Vital Method for Exiting and Re-entering a Mapped Guideway Territory	AU	2009205894
Vital Method for Exiting and Re-entering a Mapped Guideway Territory	US	8,140,201
Virtual Lock Stepping in a Vital Processing Environment for Safety Assurance	US	8,069,367
System and Method for Train Operation Approaching Grade Crossings	US	7,832,691
Efficient Data Acquisition for Track Databases	US	8,073,581

Title	Country	Patent or Application Number
System and Method for the Automatic Generation of Movement Authority Solutions in a Rail System	US	8,295,999
System and Method for the Automatic Generation of Movement Authority Solutions in a Rail System	AU	2010207749
Validation of Track Databases	AU	2010200765
Validation of Track Databases	US	8,244,456
Method for Maintaining Vital Guideway Operation in High Demand Areas	US	8,457,148
Maintaining Vitality of Data In Safety-Critical Systems	US	8,250,535
Updating Track Databases After Track Maintenance	AU	2010200767
Updating Track Databases After Track Maintenance	US	8,126,934
Database for Efficient Storage of Track Geometry and Feature Locations	AU	2010200766
Database for Efficient Storage of Track Geometry and Feature Locations	US	8,392,103
Method for Isolation of Vital Functions in a Centralized Train Control System	AU	2009205875
Method for Isolation of Vital Functions in a Centralized Train Control System	US	8,328,143

Title	Country	Patent or Application Number
Method for Managing Vital Train Movements	AU	2009205883
Method for Managing Vital Train Movements	US	8,565,945
Methods and Systems for Continually Measuring the Length of a Train Operating in a Positive Train Control Environment	US	8,688,297
Methods and Systems for Continually Measuring the Length of a Train Operating in a Positive Train Control Environment	AU	2011250693
Train Integrity and End of Train Location Via RF Ranging	US	8,918,237
Train Integrity and End of Train Location Via RF Ranging	AU	2014238229
Automated Real-Time Positive Train Control Track Database Validation	US	9,174,657
Methods and Systems of Determining End of Train Location and Clearance of Trackside Points of Interest	US	10,000,222
System and Process of Determining Vehicle Attitude	US	10,012,736
System and Process of Determining Vehicle Attitude	AU	2017279580