PATENT ASSIGNMENT

Electronic Version v1.1
Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Stephen John Cox	10/12/2011
Christopher Gardner	10/12/2011
Frank H. Coats	10/14/2011
Louis M. Notarianni	10/14/2011

RECEIVING PARTY DATA

Name:	Pandrol Limited
Street Address:	63 Station Road
City:	Addlestone, Surrey
State/Country:	UNITED KINGDOM
Postal Code:	KT15 2AR

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13979412

CH $40.00 13979412

CORRESPONDENCE DATA

Fax Number: 312-655-15
Correspondence will be sent via US Mail when the fax attempt is unsuccessful.
Phone: 312-655-1500
Email: lfdocket@welshkatz.com
Correspondent Name: Husch Blackwell LLP Husch Blackwell Sand
Address Line 1: 120 S RIVERSIDE PLAZA
Address Line 2: 22ND FLOOR
Address Line 4: CHICAGO, ILLINOIS 60606

ATTORNEY DOCKET NUMBER:	P116240USPC/2311-117041
NAME OF SUBMITTER:	Paul M. Vargo
Signature:	/Paul M. Vargo/

Date:	07/12/2013

Total Attachments: 16
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FOR DIRECTORS OF PANDROL LIMITED

ACKNOWLEDGEMENT AND ASSIGNMENT

1. I, Stephen John COX, a British citizen, of 5 Selwyn Avenue, Richmond, Surrey TW9 2HB, United Kingdom, together with Christopher GARDNER, of 1 Scofton Close, Gatesford, Worksop, Nottinghamshire, S81 7SG, United Kingdom, Frank H. COATS, of 1501 Cobblestone Court, West Deptford, New Jersey 08086, USA, and Louis M. NOTARIANNI, of 451 Jefferson Avenue, Hatboro, Pennsylvania 19040, USA, have conceived the ideas of: (i) a railway rail fastening clip for fastening a railway rail to an underlying rail foundation, which clip is formed of an elongate plate shaped such that a central region of the plate has in profile the form of a letter C, a first end region of the plate extending from one side of the central region of the plate to form a substantially planar base portion of the clip for engaging a rail fastening anchoring device secured to the rail foundation and a second end region of the plate extending from the opposite side of the central region of the plate to form a toe portion of the clip for bearing on the railway rail, such that in profile the second end region extends further than the first end region, wherein an aspect ratio H/L for the clip is ≤ 0.6, H being the height of the clip in profile defined as the maximum extent of the clip above a plane containing an outer surface of the base portion and L being the length of the clip in profile defined as the maximum extent of the clip in a direction parallel to the plane; (ii) a railway rail fastening clip for fastening a railway rail to an underlying rail foundation, which clip is formed of an elongate plate shaped such that a central region of the plate has in profile the form of a letter C, a first end region of the plate extending from one side of the central region of the plate to form a substantially planar base portion of the clip for engaging a rail fastening anchoring device secured to the rail foundation and a second end region of the plate extending from the opposite side of the central region of the plate to form a toe portion of the clip for bearing on the railway rail, such that in profile the second end region extends further than the first end region, the second end region being shaped so as to have first and second main parts, the first main part extending from the central region in a first direction and the second main part extending from the first main part in a second direction different to the first direction, wherein the first direction makes an angle α with respect to a plane containing an outer surface of the base portion, where $\alpha \leq 50°$; (iii) a railway rail fastening clip for fastening a railway rail to an underlying rail foundation, which clip is formed of an elongate plate shaped such that a central region of the plate has in profile the form of a letter C, a first end region of the plate extending from one side of the central region of the plate to form a substantially planar base portion of the clip for engaging a rail fastening anchoring device secured to the rail foundation and a second end region of the plate extending from the

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I acknowledge that

(a) these ideas were conceived by me, jointly with Christopher Gardner, Frank H. Coats and Louis M. Notarianni, in the course of my employment by Pandrol Limited, under a contract of service and, at the time of conception of the ideas, because of the nature of my duties and the particular responsibilities arising from the nature of my duties I had a special

obligation to further the interests of the group of companies of which Pandrol Limited forms a part and that

(b) in the circumstances the ideas belong to Pandrol Limited and Pandrol Limited require me to make this assignment.

I also acknowledge that

c) Pandrol Limited is about to make a patent application or has recently made a patent application, i.e. No. 1101720.9 in the United Kingdom on 1 February 2011, seeking protection for these ideas with my consent and approval.

2. I hereby assign to Pandrol Limited (insofar as vested in or belonging to me) all my worldwide right title and interest in and to any invention, improvement, design or copyright work relating to the said ideas which I have made already or which I may make in the future in either case alone or jointly with others inside or outside normal working hours including the right to make applications for patents and protection of designs and registration of copyright anywhere in the world in respect of any such invention or inventions, improvement or improvements, design or designs, or copyright work or works for the full term including any renewals or extensions and the right to claim in any such application priority from any other such application and including all rights of action powers and benefits to the same belonging or accrued.

3. I acknowledge that the financial reward received or to be received for my work within the group of companies of which Pandrol Limited forms part is good and sufficient consideration for this assignment and that acceptance by Pandrol Limited of this assignment is not be construed as indicating that they accept that I have made or contributed to or will make or contribute to any invention, improvement, design or copyright work, or that any such making or contribution is otherwise than in circumstances where the same belongs to Pandrol Limited as a matter of law.

4. I undertake promptly to sign or execute any documents which I am requested to sign or execute to enable Pandrol Limited to make and prosecute any applications for patents or protection of designs or for registration of copyright relating to the said idea without payment (other than out-of-pocket expenses) and I irrevocably appoint Pandrol Limited and its successors in title and each of them to be my attorney to sign or execute any document or do any other acts matters or things which Pandrol Limited may consider necessary or desirable for any such purpose and I hereby ratify and confirm and agree to ratify and confirm whatsoever Pandrol Limited shall lawfully do in the premises.

5. I understand that this acknowledgement and assignment does not prejudice any right I may have to apply for compensation under section 40 of the Patents Act 1977.

DATED 12th October 2011

SIGNED SEALED AND DELIVERED LS

by .....

in the presence of: .....
M. A. HAYMAN

We accept the above assignment and undertake on our own behalf and on behalf of Pandrol Limited never to claim that the execution of this document prejudices any right the assignor may have to apply for compensation under Section 40 of the Patents Act 1977

(name).....DAVID RHODES.....

(signature).....

(Director - for Pandrol Limited)

FOR EMPLOYEES OF PANDROL UK LIMITED

ACKNOWLEDGEMENT AND ASSIGNMENT

1. I, Christopher GARDNER, a British citizen, of 1 Scofton Close, Gateford, Worksop, Nottinghamshire S81 7SG, together with Stephen John COX, of 5 Selwyn Avenue, Richmond, Surrey TW9 2HB, United Kingdom, Frank H. COATS, of 1501 Cobblestone Court, West Deptford, New Jersey 08086, USA, and Louis M. NOTARIANNI, of 451 Jefferson Avenue, Hatboro, Pennsylvania 19040, USA, have conceived the ideas of: (i) a railway rail fastening clip for fastening a railway rail to an underlying rail foundation, which clip is formed of an elongate plate shaped such that a central region of the plate has in profile the form of a letter C, a first end region of the plate extending from one side of the central region of the plate to form a substantially planar base portion of the clip for engaging a rail fastening anchoring device secured to the rail foundation and a second end region of the plate extending from the opposite side of the central region of the plate to form a toe portion of the clip for bearing on the railway rail, such that in profile the second end region extends further than the first end region, wherein an aspect ratio H/L for the clip is ≤ 0.6, H being the height of the clip in profile defined as the maximum extent of the clip above a plane containing an outer surface of the base portion and L being the length of the clip in profile defined as the maximum extent of the clip in a direction parallel to the plane; (ii) a railway rail fastening clip for fastening a railway rail to an underlying rail foundation, which clip is formed of an elongate plate shaped such that a central region of the plate has in profile the form of a letter C, a first end region of the plate extending from one side of the central region of the plate to form a substantially planar base portion of the clip for engaging a rail fastening anchoring device secured to the rail foundation and a second end region of the plate extending from the opposite side of the central region of the plate to form a toe portion of the clip for bearing on the railway rail, such that in profile the second end region extends further than the first end region, the second end region being shaped so as to have first and second main parts, the first main part extending from the central region in a first direction and the second main part extending from the first main part in a second direction different to the first direction, wherein the first direction makes an angle α with respect to a plane containing an outer surface of the base portion, where $\alpha \leq 50°$; (iii) a railway rail fastening clip for fastening a railway rail to an underlying rail foundation, which clip is formed of an elongate plate shaped such that a central region of the plate has in profile the form of a letter C, a first end region of the plate extending from one side of the central region of the plate to form a substantially planar base portion of the clip for engaging a rail fastening anchoring device secured to the rail foundation and a second end region of the plate extending from the opposite side of the

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I acknowledge that

(a) these ideas were conceived by me, jointly with Stephen John Cox, Frank H. Coats and Louis M. Notarianni, in the course of my employment by Pandrol UK Limited, under a contract of service and in the course of my normal duties under such employment or in the course of duties specifically assigned to me, and in either case in circumstances where an invention might reasonably be expected to result from the carrying out of my duties

and that

(b) in the circumstances the ideas belong to Pandrol UK Limited, a sister company of Pandrol Limited, and Pandrol UK Limited require me to make this assignment to Pandrol Limited.

I also acknowledge that

(c) Pandrol Limited is about to make a patent application or has recently made a patent application, i.e. No. 1101720.9 in the United Kingdom on 1 February 2011, seeking protection for the ideas with my consent and approval.

2. I hereby assign to Pandrol Limited (insofar as vested in or belonging to me) all my worldwide right title and interest in and to any invention, improvement, design or copyright work relating to the said ideas which I have made already or which I may make in the future in either case alone or jointly with others inside or outside normal working hours including the right to make applications for patents and protection of designs and registration of copyright anywhere in the world in respect of any such invention or inventions, improvement or improvements, design or designs, or copyright work or works for the full term including any renewals or extensions and the right to claim in any such application priority from any other such application and including all rights of action powers and benefits to the same belonging or accrued.

3. I acknowledge that the financial reward received or to be received for my work within the group of companies of which Pandrol Limited forms part is good and sufficient consideration for this assignment and that acceptance by Pandrol Limited of this assignment is not be construed as indicating that they or Pandrol UK Limited accept that I have made or contributed to or will make or contribute to any invention, improvement, design or copyright work, or that any such making or contribution is otherwise than in circumstances where the same belongs to Pandrol Limited as a matter of law.

4. I undertake promptly to sign or execute any documents which I am requested to sign or execute to enable Pandrol Limited to make and prosecute any applications for patents or protection of designs or for registration of copyright relating to the said ideas without payment (other than out-of-pocket expenses) and I irrevocably appoint Pandrol Limited and its successors in title and each of them to be my attorney to sign or execute any document or do any other acts matters or things which Pandrol Limited may consider necessary or desirable for any such purpose and I hereby ratify and confirm and agree to ratify and confirm whatsoever Pandrol Limited shall lawfully do in the premises.

5. I understand that this acknowledgement and assignment does not prejudice any right I may have to apply for compensation under section 40 of the Patents Act 1977.

DATED 12 OCTOBER 2011

SIGNED SEALED AND DELIVERED LS

by .....C Gardner.....

in the presence of: .....A.P. Slowe.....

ANDREW SLOWE

We accept the above assignment and undertake on our own behalf and on behalf of Pandrol Limited never to claim that the execution of this document prejudices any right the assignor may have to apply for compensation under Section 40 of the Patents Act 1977

(name) .....DAVID RHODES.....

(signature) .....D Rhodes.....

(Directors – for Pandrol Limited)

FOR EXECUTIVES OF PANDROL USA LLP

ACKNOWLEDGEMENT AND ASSIGNMENT

1. I, Frank H. COATS, a US citizen, of 1501 Cobblestone Court, West Deptford, New Jersey 08086, USA, together with Stephen John COX, of 5 Selwyn Avenue, Richmond, Surrey TW9 2HB, United Kingdom, Christopher GARDNER, of 1 Scofton Close, Gatesford, Worksop, Nottinghamshire, S81 7SG, United Kingdom, and Louis M. NOTARIANNI, of 451 Jefferson Avenue, Hatboro, Pennsylvania 19040, USA, have conceived the ideas of: (i) a railway rail fastening clip for fastening a railway rail to an underlying rail foundation, which clip is formed of an elongate plate shaped such that a central region of the plate has in profile the form of a letter C, a first end region of the plate extending from one side of the central region of the plate to form a substantially planar base portion of the clip for engaging a rail fastening anchoring device secured to the rail foundation and a second end region of the plate extending from the opposite side of the central region of the plate to form a toe portion of the clip for bearing on the railway rail, such that in profile the second end region extends further than the first end region, wherein an aspect ratio H/L for the clip is ≤ 0.6, H being the height of the clip in profile defined as the maximum extent of the clip above a plane containing an outer surface of the base portion and L being the length of the clip in profile defined as the maximum extent of the clip in a direction parallel to the plane; (ii) a railway rail fastening clip for fastening a railway rail to an underlying rail foundation, which clip is formed of an elongate plate shaped such that a central region of the plate has in profile the form of a letter C, a first end region of the plate extending from one side of the central region of the plate to form a substantially planar base portion of the clip for engaging a rail fastening anchoring device secured to the rail foundation and a second end region of the plate extending from the opposite side of the central region of the plate to form a toe portion of the clip for bearing on the railway rail, such that in profile the second end region extends further than the first end region, the second end region being shaped so as to have first and second main parts, the first main part extending from the central region in a first direction and the second main part extending from the first main part in a second direction different to the first direction, wherein the first direction makes an angle α with respect to a plane containing an outer surface of the base portion, where $\alpha \leq 50^{\circ}$; (iii) a railway rail fastening clip for fastening a railway rail to an underlying rail foundation, which clip is formed of an elongate plate shaped such that a central region of the plate has in profile the form of a letter C, a first end region of the plate extending from one side of the central region of the plate to form a substantially planar base portion of the clip for engaging a rail fastening anchoring device secured to the rail foundation and a second end region of the plate extending from the

LLP forms a part and that

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5. I understand that this acknowledgement and assignment does not prejudice any right I may have to apply for compensation under section 40 of the Patents Act 1977.

DATED 14 OCTOBER 2011

SIGNED SEALED AND DELIVERED LS

by .....

in the presence of: Bettie e/c Albertson

We accept the above assignment and undertake on our own behalf and on behalf of Pandrol Limited never to claim that the execution of this document prejudices any right the assignor may have to apply for compensation under Section 40 of the Patents Act 1977

(name).....

(signature).....DAVID RHODES.....

(Director - for Pandrol Limited)

FOR EXECUTIVES OF PANDROL USA LLP

ACKNOWLEDGEMENT AND ASSIGNMENT

1. I, Louis M. NOTARIANNI, a US citizen, of 451 Jefferson Avenue, Hatboro, Pennsylvania 19040, USA, together with Stephen John COX, of 5 Selwyn Avenue, Richmond, Surrey TW9 2HB, United Kingdom, Christopher GARDNER, of 1 Scofton Close, Gatesford, Worksop, Nottinghamshire, S81 7SG, United Kingdom, and Frank H. COATS, of1501 Cobblestone Court, West Deptford, New Jersey 08086, USA, have conceived the ideas of: (i) a railway rail fastening clip for fastening a railway rail to an underlying rail foundation, which clip is formed of an elongate plate shaped such that a central region of the plate has in profile the form of a letter C, a first end region of the plate extending from one side of the central region of the plate to form a substantially planar base portion of the clip for engaging a rail fastening anchoring device secured to the rail foundation and a second end region of the plate extending from the opposite side of the central region of the plate to form a toe portion of the clip for bearing on the railway rail, such that in profile the second end region extends further than the first end region, wherein an aspect ratio H/L for the clip is ≤ 0.6, H being the height of the clip in profile defined as the maximum extent of the clip above a plane containing an outer surface of the base portion and L being the length of the clip in profile defined as the maximum extent of the clip in a direction parallel to the plane; (ii) a railway rail fastening clip for fastening a railway rail to an underlying rail foundation, which clip is formed of an elongate plate shaped such that a central region of the plate has in profile the form of a letter C, a first end region of the plate extending from one side of the central region of the plate to form a substantially planar base portion of the clip for engaging a rail fastening anchoring device secured to the rail foundation and a second end region of the plate extending from the opposite side of the central region of the plate to form a toe portion of the clip for bearing on the railway rail, such that in profile the second end region extends further than the first end region, the second end region being shaped so as to have first and second main parts, the first main part extending from the central region in a first direction and the second main part extending from the first main part in a second direction different to the first direction, wherein the first direction makes an angle α with respect to a plane containing an outer surface of the base portion, where $\alpha \leq 50^{0}$; (iii) a railway rail fastening clip for fastening a railway rail to an underlying rail foundation, which clip is formed of an elongate plate shaped such that a central region of the plate has in profile the form of a letter C, a first end region of the plate extending from one side of the central region of the plate to form a substantially planar base

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I also acknowledge that

c) Pandrol Limited is about to make a patent application or has recently made a patent application, i.e. No. 1101720.9 in the United Kingdom on 1 February 2011, seeking protection for these ideas with my consent and approval.

2. I hereby assign to Pandrol Limited (insofar as vested in or belonging to me) all my worldwide right title and interest in and to any invention, improvement, design or copyright work relating to the said ideas which I have made already or which I may make in the future in either case alone or jointly with others inside or outside normal working hours including the right to make applications for patents and protection of designs and registration of copyright anywhere in the world in respect of any such invention or inventions, improvement or improvements, design or designs, or copyright work or works for the full term including any renewals or extensions and the right to claim in any such application priority from any other such application and including all rights of action powers and benefits to the same belonging or accrued.

3. I acknowledge that the financial reward received or to be received for my work within the group of companies of which Pandrol USA LLP part is good and sufficient consideration for this assignment and that acceptance by Pandrol Limited of this assignment is not be construed as indicating that they or Pandrol USA LLP accept that I have made or contributed to or will make or contribute to any invention, improvement, design or copyright work, or that any such making or contribution is otherwise than in circumstances where the same belongs to Pandrol USA LLP or Pandrol Limited as a matter of law.

4. I undertake promptly to sign or execute any documents which I am requested to sign or execute to enable Pandrol Limited to make and prosecute any applications for patents or protection of designs or for registration of copyright relating to the said idea without payment (other than out-of-pocket expenses) and I irrevocably appoint Pandrol Limited and its successors in title and each of them to be my attorney to sign or execute any document or do any other acts matters or things which Pandrol Limited may consider necessary or desirable for any such purpose and I hereby ratify and confirm and agree to ratify and confirm whatsoever Pandrol

Limited shall lawfully do in the premises.

5. I understand that this acknowledgement and assignment does not prejudice any right I may have to apply for compensation under section 40 of the Patents Act 1977.

DATED 14TH OCTOBER 2011

SIGNED SEALED AND DELIVERED LS

by .....

in the presence of: .....

We accept the above assignment and undertake on our own behalf and on behalf of Pandrol Limited never to claim that the execution of this document prejudices any right the assignor may have to apply for compensation under Section 40 of the Patents Act 1977

(name).....DAVID RHODES.....

(signature).....

(Director - for Pandrol Limited)