

10-11-2006



103319277

Attorney's Docket No. 1024944-000166

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies):

1) JULIEN FLAMENT, 2) PATRICE ESTOR, 3) CHRISTOPHE EGRSZEGI

2. Name and address of receiving party(ies):

MICHELIN RECHERCHE ET TECHNIQUE S.A.
 ROUTE LOUIS BRAILLE 10 ET 12
 CH-1763 GRANGES-PACCOT
 SWITZERLAND

3. Nature of Conveyance/Execution Date(s):

Execution Date(s): AUG 22, 2006; SEPT 5, 2006; AUG 28, 2006

☒ Assignment☐ Security Agreement☐ Joint Research Agreement☐ Government Interest Agreement☐ Other: _____☐ Executive Order 9424 Confirmatory License☐ Merger☐ Change of Name

4. Application or patent number(s):

A. Patent Application No.(s)

10/583,959

B. Patent No.(s)

☐ This document is being filed together with a new application.

5. Name and address to whom correspondence concerning document should be mailed:

Name: Alan E. Kopecki

Address: Buchanan Ingersoll & Rooney PC
 Customer Number 21839
 P.O. Box 1404
 Alexandria, VA 22313-1404

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40

☐ Authorized to be charged by credit card. PTO Form 2038 attached.☒ Authorized to be charged to deposit account 02-4800☐ Enclosed.☐ None required (gov't interest not affecting title)

8.

Signature:

Signature

25813

Reg. No.

October 5, 2006

Date

Alan E. Kopecki
 Name of Person Signing

Total number of pages including cover sheet, attachments, and documents:

5

10/10/2006 NJAMA1 00000068 024800 10583959

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(40.00 DA)

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
 Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, VA 22313-1450

PATENT
 REEL: 018383 FRAME: 0973

10.5.06

ASSIGNMENT

(JOINT)

THIS ASSIGNMENT, by 1) JULIEN FLAMENT, 2) PATRICE ESTOR and 3) CHRISTOPHE EGRSZEGI, residing at 1) GREER, SOUTH CAROLINA 29650, 2) GREER, SOUTH CAROLINA 29650, and 3) 63230 MAZAYE, FRANCE (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in METHOD FOR DETERMINING EFFORT TRANSMITTED BETWEEN THE WHEEL OF A VEHICLE AND A WHEEL SUPPORT set forth in an application for Letters Patent of the United States, which is a

- (1) ☐ provisional application
 - (a) ☐ bearing Application No. , and filed on ;
 - (b) ☐ to be filed herewith; or
- (2) ☒ non-provisional application
 - (a) ☒ bearing Application No. PCT/FR2004/003048, and filed on November 26, 2004;
 - (b) ☐ having an oath or declaration executed on even date herewith prior to filing of application;
 - (c) ☐ having an oath or declaration executed on a different date than this Assignment; and

WHEREAS, MICHELIN RECHERCHE ET TECHNIQUE S.A., a corporation duly organized under and pursuant to the laws of SWITZERLAND and having a principal place of business at ROUTE LOUIS BRAILLE 10 ET 12, CH-1763 GRANGES-PACCOT, SWITZERLAND (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefore and thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefore and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behoof and the use and behoof of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

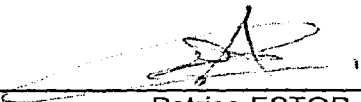
AND the Assignors hereby authorize and request the attorneys of Buchanan Ingersoll PC to insert in the spaces provided above the title of the invention, filing date, application number, and attorney's docket number of said application when known.

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behoof of the Assignee, its successors, legal representatives, and assigns.

DATE 08/22/2006

By 
Julien FLAMENT

DATE 08/08/2006

By 
Patrice ESTOR

DATE _____

By _____
Christophe EGERSZEGI

PCT

RAPPORT PRÉLIMINAIRE INTERNATIONAL SUR LA BREVETABILITÉ (chapitre I du Traité de coopération en matière de brevets)

(règle 44bis du PCT)

Référence du dossier du déposant ou du mandataire 500.218	POUR SUITE À DONNER		Voir le point 4 ci-dessous
Demande internationale no. PCT/FR2004/003048	Date du dépôt international (<i>jour/mois/année</i>) 26 November 2004 (26.11.2004)	Date de priorité (<i>jour/mois/année</i>) 26 December 2003 (26.12.2003)	
Classification internationale des brevets (8 ^e édition, sauf indication d'une #dition ant#rieure) Voir les informations pertinentes dans le formulaire PCT/ISA/237			
Déposant SOCIETE DE TECHNOLOGIE MICHELIN			

1. Le présent rapport préliminaire international sur la brevetabilité (chapitre I) est établi par le Bureau international au nom de l'administration chargée de la recherche internationale selon la règle 44bis.1.a).

2. Ce RAPPORT comprend un total de 8 feuilles, y compris la présente feuille de couverture.

Dans les feuilles jointes, toute référence à l'opinion écrite de l'administration chargée de la recherche internationale doit être entendue, à la place, comme une référence au rapport préliminaire international sur la brevetabilité (chapitre I).

3. Le présent rapport contient des indications relatives aux points suivants :

- | | | |
|-------------------------------------|---------------|---|
| <input checked="" type="checkbox"/> | Cadre n° I | Base de l'opinion |
| <input type="checkbox"/> | Cadre n° II | Priorité |
| <input type="checkbox"/> | Cadre n° III | Absence de formulation d'opinion quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle |
| <input type="checkbox"/> | Cadre n° IV | Absence d'unité de l'invention |
| <input checked="" type="checkbox"/> | Cadre n° V | Déclaration motivée selon l'article 35.2) quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle; citations et explications à l'appui de cette déclaration |
| <input type="checkbox"/> | Cadre n° VI | Certains documents cités |
| <input type="checkbox"/> | Cadre n° VII | Certaines irrégularités relevées dans la demande internationale |
| <input type="checkbox"/> | Cadre n° VIII | Certaines observations relatives à la demande internationale |

4. Le Bureau international communiquera le présent rapport aux offices désignés conformément aux règles 44bis.3.c) et 93bis.1 mais pas avant l'expiration du délai de 30 mois à compter de la date de priorité (règle 44bis.2), sauf si le déposant a présenté une requête expresse à cet égard en vertu de l'article 23.2).

Bureau international de l'OMPI 34, chemin des Colombettes 1211 Geneva 20, Switzerland		Date d'établissement du présent rapport 29 August 2006 (29.08.2006)
no de télécopieur +41 22 338 82 70		Fonctionnaire autorisé Beate Giffo-Schmitt
Formulaire PCT/IB/373 (janvier 2004)		e-mail: pt03@wipo.int

PATENT COOPERATION TREATY

TRANSLATION

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing
(day/month/year)See Form PCT/ISA/210
(sheet 2)

Applicant's or agent's file reference

500.218

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/FR2004/003048

International filing date (day/month/year)

26.11.2004

Priority date (day/month/year)

26.12.2003

International Patent Classification (IPC) or both national classification and IPC

H04L29/06

Applicant

SOCIETE DE TECHNOLOGIE MICHELIN

1. This opinion contains indications relating to the following items:



Box No. I Basis of the opinion



Box No. II Priority



Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability



Box No. IV Lack of unity of invention



Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement



Box No. VI Certain documents cited



Box No. VII Certain defects in the international application



Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/EP

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/FR2004/003048

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language
_____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/FR2004/003048

Box No. II

Priority

1. ☒ The following document has not yet been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date in the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/FR2004/003048

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability:
citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-15, 17	YES
	Claims	16	NO
Inventive step (IS)	Claims	1-15, 17	YES
	Claims	16	NO
Industrial applicability (IA)	Claims	1-17	YES
	Claims		NO

2. Citations and explanations:

1 Reference is made to the following documents:

D1: WO 01/04589 A (SOCIÉTÉ DE TECHNOLOGIE
MICHELIN; MICHELIN RECHERCHE ET TECHNIQUE
S.A.) 18 January 2001 (2001-01-18)

D2: FR 2 819 589 A (SOCIÉTÉ DE TECHNOLOGIE
MICHELIN; MICHELIN RECHERCHE ET TECHNIQUE
S.A.) 19 July 2002 (2002-07-19)

D3: US 5 003 819 A (KOOPMANN) 2 April 1991 (1991-
04-02)

2 Claim 1

2.1 It emerges clearly from the description (page 2,
lines 1-4) that the wheel is mounted on a
dynamometric hub with a fixed axle, which defines
a feature which is essential to the definition of
the invention. Since claim 1 does not contain this
feature, it does not meet the requirement
following from PCT Article 6 taken in combination
with PCT Rule 6.3(b) that any independent claim
must contain all the technical features essential
for the definition of the invention.

Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
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2.2 Document D1, which is considered to represent the most relevant prior art, describes (the references between parentheses apply to this document) a method for determining a force transmitted between a vehicle wheel and a wheel support (abstract), said method comprising the steps: (a) the wheel is mounted pivotably on a wheel support consisting of a dynamometric hub with a fixed axle, said wheel being provided with a tyre, (b) said tyre is pressed against a means of excitation (page 8, lines 21-25; page 13, line 23; figures 1 and 4), (c) a fixed support force which is transmitted between said wheel and said support when said tyre is excited with said means of excitation is measured (abstract; page 9, lines 22-25), said wheel support being fixed in at least one direction in relation to said means of excitation (figures 1 and 4).

2.3 The subject matter of independent claim 1 differs by the step consisting of calculating, as a function of said fixed support force, a suspended support force which would be transmitted between said wheel and a wheel support having a degree of freedom of suspension in at least one given direction in relation to said means of excitation.

2.4 The subject matter of claim 1 is therefore novel (PCT Article 33(2)). The problem that the present invention is intended to solve can be considered to be: improving the determination of the force transmitted between a wheel and its support.

Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement
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2.5 The solution to this problem, as proposed in claim 1 of the present application, is considered to involve an inventive step (PCT Article 33(3)), for the following reasons: starting from simple measurement of the force exerted by a vehicle wheel on a dynamometric hub with a fixed axle, the method makes it possible to model the actual force transmitted by the wheel to the vehicle taking the presence of the suspension into account. This modelled actual force makes it possible to work more accurately and more closely to reality during vehicle modelling, in particular acoustic research inside the passenger compartment.

2.6 Claims 2-15 are dependent on claim 1 and thus also comply, as such, with the requirements of novelty and inventive step of the PCT.

3 Claim 16

The present application fails to comply with the requirements of PCT Article 33(1) since the subject matter of claim 16 does not meet the requirement of novelty defined in PCT Article 33(2).

Document D1 describes implicitly a processing apparatus which comprises an interface and programmed calculation means.

Moreover, it is to be pointed out that any computer is suitable for implementing the method described.