

As. 135.174

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO  
  
No. 15-304594-00003-0000  
Fecha: 2016-04-13 15:41:13 Dep. 2020 DIR.NUEVASCR  
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Act. 444 RESPUESTAREQUE Folios: 11

Señor

DIRECTOR DIVISIÓN DE NUEVAS CREACIONES

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO

E.

S.

D.

REF: Expediente No. 15.304594

**RESPUESTA A EXAMEN DE FORMA**

**JUAN PABLO CADENA SARMIENTO**, portador de la tarjeta profesional No. 57.492 del C.S.J., obrando como apoderado de la sociedad solicitante me permito dar respuesta al Oficio No. 1199 notificado por fijación en lista el 16 de Febrero de 2016.

**Petitorio**

Aclaremos que el nombre correcto de uno de los inventores es Ignacio Ponce de León tal como aparece en la cesión y que evidentemente se trata de un error tipográfico en la publicación internacional ya que el nombre *Ingnacio* no existe en la lengua castellana. Para mayor claridad de su despacho, adjuntamos copia del PCT request en donde aparece el nombre correcto del citado inventor. Adicionalmente, deseamos informar que el solicitante está en proceso de corrección del nombre ante la oficina internacional,

**Poder**

Adjuntamos poder respectivo

**Resumen**

La presente invención proporciona un proceso para tratar carbón eliminando la humedad y las materias volátiles del carbón para producir un producto combustible que está libre de contaminantes indeseados, los cuales se emiten durante la combustión del carbón.

En un aspecto, se provee un proceso para producir un carbón tratado, proceso que comprende calentar el carbón para eliminar los volátiles y secar el producto para producir un carbón tratado, que se compone esencialmente de carbono e hidrógeno

La invención es útil en el campo del tratamiento del carbón.

### **Reivindicaciones**

A diferencia de la posición de su despacho, el proceso reivindicado si se encuentra caracterizado por etapas debidamente definidas como lo son la etapa de calentamiento y la etapa de secado. Las condiciones técnicas exigidas por su despacho no resultan esenciales para la invención por lo que su inclusión dentro de la reivindicación principal es innecesaria. De hecho, a lo largo del pliego reivindicatorio no se encuentra ninguna característica opcional dirigida a condiciones específicas de proceso.

El término esencialmente ha sido eliminado del pliego reivindicatorio. Sin embargo, el término cantidad suficiente no lo hemos eliminado ya que el mismo resulta totalmente comprensible dentro del contexto de la invención. Específicamente, la temperatura debe ser tal para sostener una combustión estable en una caldera industrial existente tal como la misma reivindicación indica. Sería imposible indicar una temperatura exacta en el contexto de la reivindicación.

En cuanto a los términos generales de las reivindicaciones 1, 7 y 8, estamos en desacuerdo ya que los mismos son ampliamente utilizados en el campo técnico y adicionalmente resultan totalmente claros en vista de las enseñanzas de la descripción. En cuanto a las características funcionales, es nuestro deseo aclarar que las mismas son aceptadas por su despacho según el instructivo de patentabilidad. La reivindicación 6 ha sido eliminada.

La nueva reivindicación 7 es totalmente clara. Cabe anotar que las falsas dependencias pueden existir; no siempre una dependencia es entre reivindicaciones de la misma categoría tal como se desprende del instructivo de patentabilidad:

*"La relación que existe entre reivindicaciones no es siempre de dependencia. Si una reivindicación se refiere a otra, pero no depende de ella, se considera que hay una "falsa dependencia".*

*Por ejemplo:*

*Una reivindicación de una categoría se refiere otra de otra categoría, pero no depende de ella:*

*Reivindicación 1. Un producto...*

*Reivindicación 2. Un proceso para fabricar el producto de la reivindicación 1...*

*Reivindicación 3. Un aparato para llevar a cabo el proceso de la reivindicación 2..."*

En cuanto a la reivindicación 7 (antigua 8), no vemos necesaria la inclusión de proporciones ya que ello no es esencial para la invención.

En vista de las consideraciones aquí abordadas, se concluye que la totalidad de la materia que conforma la presente divulgación cumple a cabalidad con lo establecido por la legislación vigente, razón por la que solicito sean retiradas las respectivas objeciones y, consecuentemente, se proceda a continuar con el trámite de la presente solicitud.

Atentamente,

  
**JUAN PABLO CADENA SARMIENTO**

T.P. No. 57.492 del C.S.J.

C.C. 80.410.337 de Usaquén

Calle 70 A No. 4 - 41

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## REIVINDICACIONES

1. Un proceso para producir un carbón tratado, proceso que comprende calentar el carbón para eliminar los volátiles y secar el producto para producir un carbón tratado, que se compone de carbono e hidrógeno.
2. El proceso de acuerdo con la reivindicación 1, en donde el proceso se lleva a cabo usando un proceso de calentamiento escalonado para descomponer y capturar los volátiles y los gases derivados del carbón.
3. El proceso de la reivindicación 1 y que comprende además combustionar el carbón tratado introduciendo un flujo integrado en co-corriente de gas natural, junto con el carbón tratado, en una cantidad suficiente para sostener una combustión estable en una caldera industrial existente, configurada para quemar carbones bituminosos.
4. El proceso de la reivindicación 3, en donde el flujo integrado se introduce en co-corriente con el carbón tratado.
5. Proceso de acuerdo con la reivindicación 3, en donde la combustión se lleva a cabo en una caldera de ciclo combinado o una caldera multi-combustible, que es capaz de quemar los dos combustibles separadamente o al mismo tiempo.
6. Un carbón tratado que consta de carbono e hidrógeno, en el cual se han eliminado la humedad y las materias volátiles para producir un producto combustible, el cual está libre de contaminantes indeseados.
7. Un producto compacto que contiene el carbón tratado de la reivindicación 1, en combinación con biomasa torrefacta.

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## POWER OF ATTORNEY

I (We), **CLEAN COAL TECHNOLOGIES, INC.**

domiciled in 295, Madison Avenue, Floor 12 New York, NY 10017, U.S.A.

Hereby appoints **JUAN PABLO CADENA SARMIENTO** and/or **MARTIN E. TORRES CARDOZO**, of Bogotá, Colombia, my (our) true and lawful attorneys with special, ample and sufficient power to obtain from the Colombian administrative, judicial and police offices and authorities, in any instance, privileges of patents of invention, registration of trademarks, industrial designs and utility models; registration of commercial names, slogans and emblems, registration of copyright and contracts related thereto, certificates of obtainers of vegetables varieties, as well as extensions, renewals and recordal of assignments and changes of name, domicile and address related to the above; to prepare, prosecute and register licenses of any kind; to act as plaintiff or defendant in any instance or recourse, and before any judge, corporation, public official or authority in judicial, administrative and police actions, such as: oppositions to the registration of trademarks; caducity, cancellation and nullity actions; claim actions derived from the obtaining or exploitation of licenses, action of unfair competition; criminal proceedings, actions for payment of damages: claims or observations on patent applications, models, industrial designs and utility models; in the exercise of preventive measures and in other actions or similar proceedings.

To that effect they hereby empowered to file applications, formulate descriptions, amendments, protests, declarations, oppositions, cancellations, nullities, appeals and claims; to pay taxes, quotas and assessments prescribed by law, renounce or waive the rights granted or in the process of granting; to receive all kinds of documents and valuables, giving the respective release of receipt, and, in general, to take before said authorities the necessary steps to such effect, and any measures that they may deem pertinent to the safeguard of my (our) interest(s) with all the other necessary legal powers.

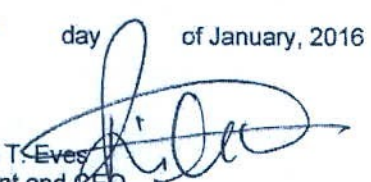
This power includes the faculty to ratify or confirm desist, settle and compromise on my (our) behalf, and to substitute this power in whole or in part and to revoke substitutions. At the same time I (We) hereby appoint **JUAN PABLO CADENA SARMIENTO** and/or **MARTIN E. TORRES CARDOZO**, domiciled in calle 70A No. 4-41, my (our) attorney(s) in fact, with powers to receive notifications and to designate judicial and extrajudicial attorneys.

Granted and signed in Manhattan, NY.

this 20 day of January, 2016

Signature

Name Robin T. Eves  
Title President and CEO



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## PODER

Yo (nosotros), **CLEAN COAL TECHNOLOGIES, INC.**

domiciliado(s) en 295, Madison Avenue, Floor 12 New York, NY 10017, U.S.A.

Nombro(amos) a: **JUAN PABLO CADENA SARMIENTO y/o MARTIN E. TORRES CARDOZO**, de Bogotá, Colombia, apoderados verdaderos y legales con poder especial, amplio y suficiente, para recabar de las oficinas y autoridades colombianas administrativas, judiciales y de policía, en cualquier instancia o recurso, la obtención de patentes de invención, registros de marcas, diseños industriales, modelos de utilidad, depósitos de nombres comerciales y enseñas, lemas comerciales, nombres comerciales, registros de derechos de autor y contratos sobre los mismos, obtención de certificados de obtentor de variedades vegetales, así como sus prórrogas, renovaciones, anotaciones de traspaso, cambios de nombre y/o domicilio y/o dirección; elaborar, tramitar y registrar contratos de licencia y licencias de cualesquiera clases; intervenir como demandante o como demandado en cualquier instancia y recurso ante cualquier juez, corporación, funcionario público o autoridad en acciones judiciales, administrativas y de policía tales como: oposiciones al registro de marcas; acciones de caducidad, cancelación y nulidad; acciones reivindicatorias, acciones derivadas de la obtención o explotación de licencias; acciones de competencia desleal; demandas penales; acciones de indemnización de perjuicios, reclamos y observaciones a solicitudes de patentes, diseños industriales, modelos de utilidad, en el ejercicio de medidas cautelares y en otras acciones o medidas similares.

A este efecto, lo(s) faculto(amos) para elevar solicitudes, formular descripciones, enmiendas, protestas, declaraciones, oposiciones, cancelaciones, nulidades, apelaciones y reclamos; pagar impuestos, cuotas y gravámenes prescritos por la ley; renunciar o desistir a derechos concedidos o en curso de concesión; recibir toda clase de documentos y valores, dando el descargo respectivo, y, en general, para dar ante dichas autoridades todos los pasos necesarios al efecto indicado y tomar todas las medidas que creyeran conducentes al resguardo de mis (nuestros intereses), con todas las demás facultades legales necesarias.

Este poder comprende la facultad de ratificar o confirmar en mi (nuestro) nombre lo actuado así como la facultad de desistir, transigir, comprometer, y la de sustituirlo en todo o en parte y revocar sustituciones. Asimismo nombro(amos) a: **JUAN PABLO CADENA SARMIENTO y/o MARTIN E. TORRES CARDOZO**, domiciliado(s) en la calle 70A No. 4-41, mis (nuestros) apoderados en Colombia, con facultades para recibir notificaciones y designar apoderados judiciales o extrajudiciales.

Otorgado y firmado en

Manhattan, NY.

hoy 20 de Junio de

2006

Firma

Nombre  
Cargo

Robin T. Eves  
President & CEO.

# PCT REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty

|                                                                                           |  |
|-------------------------------------------------------------------------------------------|--|
| For receiving Office use only                                                             |  |
| <b>PCT/US14/40256</b>                                                                     |  |
| International Application No.                                                             |  |
| 30 MAY 2014 (30.05.14)                                                                    |  |
| International Filing Date                                                                 |  |
| <b>PCT INTERNATIONAL APPLICATION RO/US</b>                                                |  |
| Name of receiving Office and "PCT International Application"                              |  |
| Applicant's or agent's file reference<br>(if desired) (12 characters maximum) LCM-5214-74 |  |

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                      |                                                        |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|--------------------------------------------------------|--|
| <b>Box No. I</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>TITLE OF INVENTION</b>                                            |                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | TREATMENT OF COAL                                                    |                                                        |  |
| <b>Box No. II</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>APPLICANT</b>                                                     | <input type="checkbox"/> This person is also inventor. |  |
| Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)<br><br><b>CLEAN COAL TECHNOLOGIES, INC.</b><br><b>12518 W. Atlantic Blvd</b><br><b>Coral Springs, Florida 33071</b><br><b>United States of America</b>                                                                                                                                                                                     |                                                                      | Telephone No.                                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                      | Facsimile No.                                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                      | Applicant's registration No. with the Office           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                      |                                                        |  |
| <b>E-mail authorization:</b> Marking one of the check-boxes below authorizes the receiving Office, the International Searching Authority, the International Bureau and the International Preliminary Examining Authority to use the e-mail address indicated in this Box to send, notifications issued in respect of this international application to that e-mail address if those offices are willing to do so.<br><input checked="" type="checkbox"/> as advance copies followed by paper notifications; or <input type="checkbox"/> exclusively in electronic form (no paper notifications will be sent).<br>E-mail address: NV-FOREIGN-DOCKETING@NIXONVAN.COM |                                                                      |                                                        |  |
| State (that is, country) of nationality:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                      | State (that is, country) of residence:                 |  |
| US                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                      | US                                                     |  |
| This person is applicant <input checked="" type="checkbox"/> all designated States <input type="checkbox"/> the States indicated in the Supplemental Box<br>for the purposes of:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                      |                                                        |  |
| <b>Box No. III</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)</b>             |                                                        |  |
| <input checked="" type="checkbox"/> Further applicants and/or (further) inventors are indicated on a continuation sheet.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                      |                                                        |  |
| <b>Box No. IV</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE</b> |                                                        |  |
| The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as: <input checked="" type="checkbox"/> agent <input type="checkbox"/> common representative                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                      |                                                        |  |
| Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)<br><br><b>MITCHARD, Leonard C.</b><br><b>Nixon &amp; Vanderhye P.C.</b><br><b>901 North Glebe Road, 11<sup>th</sup> Floor</b><br><b>Arlington, Virginia 22203-1808</b><br><b>United States of America</b>                                                                                                                                                                                                                                                                                         |                                                                      | Telephone No.                                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                      | 703-816-4000                                           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                      | Facsimile No.                                          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                      | 703-816-4100                                           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                      | Agent's registration No. with the Office<br>29,009     |  |
| <b>E-mail authorization:</b> Marking one of the check-boxes below authorizes the receiving Office, the International Searching Authority, the International Bureau and the International Preliminary Examining Authority to use the e-mail address indicated in this Box to send, notifications issued in respect of this international application to that e-mail address if those offices are willing to do so.<br><input checked="" type="checkbox"/> as advance copies followed by paper notifications; or <input type="checkbox"/> exclusively in electronic form (no paper notifications will be sent).<br>E-mail address: NV-FOREIGN-DOCKETING@NIXONVAN.COM |                                                                      |                                                        |  |
| <input type="checkbox"/> <b>Address for correspondence:</b> Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                      |                                                        |  |

**Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)***If none of the following sub-boxes is used, this sheet should not be included in the request.*

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

**PONCE de LEON, Ignacio**  
**546 8<sup>th</sup> Street**  
**Brooklyn, New York 11215**  
**United States of America**

This person is:

- ☐ applicant only  
☐ applicant and inventor  
☒ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

☐ all designated States☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

**PAUL, Anton Dilo**  
**224 Timberlake Drive**  
**Venetia, Pennsylvania 15367**  
**United States of America**

This person is:

- ☐ applicant only  
☐ applicant and inventor  
☒ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

☐ all designated States☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only  
☐ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

☐ all designated States☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only  
☐ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

☐ all designated States☐ the States indicated in the Supplemental Box☐ Further applicants and/or (further) inventors are indicated on another continuation sheet.

(continuation sheet) (16 September 2012)

See Notes to the request form

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| <b>Box No. V      DESIGNATIONS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                  |                                                      |                                          |                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------------------------|------------------------------------------|------------------------------------------------|
| <p>The filing of this request constitutes under Rule 4.9(a), the designation of all Contracting States bound by the PCT on the international filing date, for the grant of every kind of protection available and, where applicable, for the grant of both regional and national patents.</p> <p>However,</p> <p><input type="checkbox"/> DE      Germany is <b>not designated</b> for any kind of national protection</p> <p><input type="checkbox"/> JP      Japan is <b>not designated</b> for any kind of national protection</p> <p><input type="checkbox"/> KR      Republic of Korea is <b>not designated</b> for any kind of national protection</p> <p><i>(The check-boxes above may only be used to exclude (irrevocably) the designations concerned if, at the time of filing or subsequently under Rule 26bis.1, the international application contains in Box No. VI a priority claim to an earlier national application filed in the particular State concerned, in order to avoid the ceasing of the effect, under the national law, of this earlier national application.)</i></p>                                                                                                                         |                                  |                                                      |                                          |                                                |
| <b>Box No. VI      PRIORITY CLAIM</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                  |                                                      |                                          |                                                |
| The priority of the following earlier application(s) is hereby claimed:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                  |                                                      |                                          |                                                |
| Filing date<br>of earlier application<br>(day/month/year)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Number<br>of earlier application | Where earlier application is:                        |                                          |                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                  | national application:<br>country or Member<br>of WTO | regional application:<br>regional Office | international application:<br>receiving Office |
| item (1) (30.05.2013)<br>30 May 2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 61/829,006                       | US                                                   |                                          |                                                |
| item (2)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                  |                                                      |                                          |                                                |
| item (3)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                  |                                                      |                                          |                                                |
| <input type="checkbox"/> Further priority claims are indicated in the Supplemental Box.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                  |                                                      |                                          |                                                |
| <p>Furnishing the priority documents:</p> <p><input checked="" type="checkbox"/> The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (if the earlier application(s) was filed with the receiving Office which, for the purposes of this international application, is the receiving Office) identified above as:</p> <p><input checked="" type="checkbox"/> all items      <input type="checkbox"/> item (1)      <input type="checkbox"/> item (2)      <input type="checkbox"/> item (3)      <input type="checkbox"/> other, see Supplemental Box</p> <p><input type="checkbox"/> The International Bureau is requested to obtain from a digital library, a certified copy of the earlier application(s) identified above, using, where applicable, the access code(s) indicated below (if the earlier application(s) is available to it from a digital library):</p> <p><input type="checkbox"/> item (1)      <input type="checkbox"/> item (2)      <input type="checkbox"/> item (3)      <input type="checkbox"/> other, see Supplemental Box</p> <p style="margin-left: 40px;">access code      access code      access code</p> |                                  |                                                      |                                          |                                                |
| <p><b>Restore the right of priority:</b> the receiving Office is requested to restore the right of priority for the earlier application(s) identified above or in the Supplemental Box as item(s) (      ). (See also the Notes to Box No. VI; further information <b>must</b> be provided to support a request to restore the right of priority).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                  |                                                      |                                          |                                                |
| <p><b>Incorporation by reference:</b> where an element of the international application referred to in Article 11(1)(iii)(d) or (e) or a part of the description, claims or drawings referred to in Rule 20.5(a) is not otherwise contained in this international application but is completely contained in an earlier application whose priority is claimed on the date on which one or more elements referred to in Article 11(1)(iii) were first received by the receiving Office, that element or part is, subject to confirmation under Rule 20.6, incorporated by reference in this international application for the purposes of Rule 20.6.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                  |                                                      |                                          |                                                |
| <b>Box No. VII      INTERNATIONAL SEARCHING AUTHORITY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                  |                                                      |                                          |                                                |
| <p><b>Choice of International Searching Authority (ISA)</b> (If more than one International Searching Authority is competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used):</p> <p>ISA / KR</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                  |                                                      |                                          |                                                |

**Continuation of Box No. VII USE OF RESULTS OF EARLIER SEARCH, REFERENCE TO THAT SEARCH**

☐ The ISA indicated in Box No. VII is requested to take into account the results of the earlier search(es) indicated below (see also Notes to Box VII: use of results of more than one earlier search).

Filing date (day/month/year)

Application Number

Country (or regional Office)

- ☐ **Statement (Rule 4.12(ii)):** this international application is the same, or substantially the same, as the application in respect of which the earlier search was carried out except, where applicable, that it is filed in a different language.
- ☐ **Availability of documents:** the following documents are available to the ISA in a form and manner acceptable to it and therefore do not need to be submitted by the applicant to the ISA (Rule 12bis.1(f)):
- ☐ a copy of the results of the earlier search,\*
  - ☐ a copy of the earlier application,
  - ☐ a translation of the earlier application into a language which is accepted by the ISA,
  - ☐ a translation of the results of the earlier search into a language which is accepted by the ISA,
  - ☐ a copy of any document cited in the results of the earlier search. (If known, please indicate below the document(s) available to the ISA):
- ☐ **Transmit copy of results of earlier search and other documents** (where the earlier search was not carried out by the ISA indicated above but by the same Office as that which is acting as the receiving Office): the receiving Office is requested to prepare and transmit to the ISA (Rule 12bis.1(c)):
- ☐ a copy of the results of the earlier search,\*
  - ☐ a copy of the earlier application,
  - ☐ a copy of any document cited in the results of the earlier search.

\* Where the results of the earlier search are neither available from a digital library nor transmitted by the receiving Office, the applicant is required to submit them to the receiving Office (Rule 12bis.1(a)) (See item 11, in the check-list and also Notes to Box No. VII).

Filing date (day/month/year)

Application Number

Country (or regional Office)

- ☐ **Statement (Rule 4.12(ii)):** this international application is the same, or substantially the same, as the application in respect of which the earlier search was carried out except, where applicable, that it is filed in a different language.
- ☐ **Availability of documents:** the following documents are available to the ISA in a form and manner acceptable to it and therefore do not need to be submitted by the applicant to the ISA (Rule 12bis.1(f)):
- ☐ a copy of the results of the earlier search,\*
  - ☐ a copy of the earlier application,
  - ☐ a translation of the earlier application into a language which is accepted by the ISA,
  - ☐ a translation of the results of the earlier search into a language which is accepted by the ISA,
  - ☐ a copy of any document cited in the results of the earlier search. (If known, please indicate below the document(s) available to the ISA):
- ☐ **Transmit copy of results of earlier search and other documents** (where the earlier search was not carried out by the ISA indicated above but by the same Office as that which is acting as the receiving Office): the receiving Office is requested to prepare and transmit to the ISA (Rule 12bis.1(c)):
- ☐ a copy of the results of the earlier search,\*
  - ☐ a copy of the earlier application,
  - ☐ a copy of any document cited in the results of the earlier search.

\* Where the results of the earlier search are neither available from a digital library nor transmitted by the receiving Office, the applicant is required to submit them to the receiving Office (Rule 12bis.1(a)) (See item 11, in the check-list and also Notes to Box No. VII).

☐ Further earlier searches are indicated on a continuation sheet.

**Box No. VIII DECLARATIONS**

The following declarations are contained in Boxes Nos. VIII (i) to (v) (mark the applicable check-boxes below and indicate in the right column the number of each type of declaration):

Number of declarations

- |                                                       |                                                                                                                                      |      |
|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------|
| <input type="checkbox"/> Box No. VIII (i)             | Declaration as to the identity of the inventor                                                                                       | :    |
| <input type="checkbox"/> Box No. VIII (ii)            | Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent             | :    |
| <input type="checkbox"/> Box No. VIII (iii)           | Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application | :    |
| <input checked="" type="checkbox"/> Box No. VIII (iv) | Declaration of inventorship (only for the purposes of the designation of the United States of America)                               | : *1 |
| <input type="checkbox"/> Box No. VIII (v)             | Declaration as to non-prejudicial disclosures or exceptions to lack of novelty                                                       | :    |

(third sheet) (16 September 2012)

See Notes to the request form

\*RO/US\*

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| Box No. IX CHECK LIST for EFS-Web filings – this sheet is only to be used when filing an international application with RO/US via EFS-Web                                                                                                                                |                  |                                                                                                                                                                                                                                                                                                      |                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| This international application contains the following:                                                                                                                                                                                                                   | Number of sheets | This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item):                                                                                                                                 | Number of items |
| (a) request form PCT/RO/101 (including any declarations and supplemental sheets).....                                                                                                                                                                                    | 6                | 1. <input checked="" type="checkbox"/> fee calculation sheet                                                                                                                                                                                                                                         | :               |
| (b) description (excluding any sequence listing part of the description, see (f), below)                                                                                                                                                                                 | 10               | 2. <input type="checkbox"/> original separate power of attorney                                                                                                                                                                                                                                      | :               |
| (c) claims.....                                                                                                                                                                                                                                                          | 2                | 3. <input type="checkbox"/> original general power of attorney                                                                                                                                                                                                                                       | :               |
| (d) abstract .....                                                                                                                                                                                                                                                       | 1                | 4. <input type="checkbox"/> copy of general power of attorney; reference number:                                                                                                                                                                                                                     | :               |
| (e) drawings (if any) .....                                                                                                                                                                                                                                              | 0                | 5. <input type="checkbox"/> priority document(s) identified in Box No. VI as item(s):                                                                                                                                                                                                                | :               |
| (f) sequence listing part of the description in the form of an image file (e.g. PDF).....                                                                                                                                                                                |                  | 6. <input type="checkbox"/> translation of international application into (language)                                                                                                                                                                                                                 | :               |
| <b>Total number of sheets</b><br>(including the sequence listing part of the description if filed as an image file)                                                                                                                                                      | 19               | 7. <input type="checkbox"/> separate indications concerning deposited microorganism or other biological material                                                                                                                                                                                     | :               |
| (g) sequence listing part of the description<br><input type="checkbox"/> filed in the form of an Annex C/ST.25 text file<br><input type="checkbox"/> WILL BE filed separately on physical data carrier(s), on the same day and in the form of an Annex C/ST.25 text file |                  | 8. <input type="checkbox"/> (only where item (f) is marked in the left column)<br>copy of the sequence listing in electronic form (Annex C/ST.25 text file) not forming part of the international application but furnished only for the purposes of international search under Rule 13ter).....     | :               |
| Indicate type and number of physical data carrier(s).....                                                                                                                                                                                                                |                  | 9. <input type="checkbox"/> (only where item (f) is marked in the left column)<br>a statement confirming that "the information recorded in electronic form submitted under Rule 13ter is identical to the sequence listing as contained in the international application" as filed via EFS-Web:..... | :               |
| Figure of the drawings which should accompany the abstract:                                                                                                                                                                                                              |                  | 10. <input type="checkbox"/> copy of results of earlier search(es) (Rule 12bis.1(a)).....                                                                                                                                                                                                            | :               |
|                                                                                                                                                                                                                                                                          |                  | 11. <input type="checkbox"/> other (specify) .....                                                                                                                                                                                                                                                   | :               |
| Language of filing of the international application: ENGLISH                                                                                                                                                                                                             |                  |                                                                                                                                                                                                                                                                                                      |                 |
| <b>Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE</b>                                                                                                                                                                                                  |                  |                                                                                                                                                                                                                                                                                                      |                 |
| Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).                                                                                                   |                  |                                                                                                                                                                                                                                                                                                      |                 |
| /Leonard C. Mitchard/                                                                                                                                                                                                                                                    |                  |                                                                                                                                                                                                                                                                                                      |                 |
| Leonard C. Mitchard, Reg. # 29,009                                                                                                                                                                                                                                       |                  |                                                                                                                                                                                                                                                                                                      |                 |

| For receiving Office use only                                                                                                               |                                                                                          | 2. Drawings:<br><br><input type="checkbox"/> received:<br><br><input type="checkbox"/> not received: |
|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 1. Date of actual receipt of the purported international application:                                                                       | 30 MAY 2014 (30.05.14)                                                                   |                                                                                                      |
| 3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application: |                                                                                          |                                                                                                      |
| 4. Date of timely receipt of the required corrections under PCT Article 11(2):                                                              |                                                                                          |                                                                                                      |
| 5. International Searching Authority (if two or more are competent): ISA/ KR                                                                | 6. <input type="checkbox"/> Transmittal of search copy delayed until search fee is paid. |                                                                                                      |

| For International Bureau use only                               |                               |
|-----------------------------------------------------------------|-------------------------------|
| Date of receipt of the record copy by the International Bureau: |                               |
| (last sheet - EFS) (September 16, 2012)                         | See Notes to the request form |