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Señor Director

DIRECCION DE NUEVAS CREACIONES

Superintendencia de Industria y Comercio

E. S. D.

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO



No. 10-121741- -00003-0000

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Trámite : 011

Evento : 379

Actuación : 329

Referencia : Expediente No. 10.121.741

Asunto : Solicitud de patente para: **CAÑOS DE ACERO RECUBIERTOS CON CONCRETO O MORTERO MOLDEADOS A PRESIÓN Y MÉTODOS DE FABRICACIÓN DE LOS MISMOS**

Solicitante : **AMERON INTERNATIONAL**

Fecha solicitud : 1° de octubre de 2010

1. Yo, Luz Clemencia de PÁEZ, obrando como apoderada de la sociedad solicitante en el asunto identificado en la referencia, presento con este escrito una copia del Informe Preliminar Internacional sobre Patentabilidad, realizado por la Administración Encargada en el trámite de la Solicitud Internacional No. PCT/US2009/039091 correspondiente a la presente fase nacional.

Este Informe Preliminar Internacional está conformado por 4 hojas del Informe y 4 hojas de anexos que corresponden a un nuevo capítulo reivindicatorio **conformado por 31 reivindicaciones sobre las cuales solicito se efectúe el correspondiente examen de patentabilidad**. Se anexa la correspondiente traducción al español de los mencionados anexos.

2. Atentamente solicito a ese Despacho continuar con el trámite de la solicitud de patente que se tramita en el expediente de la referencia.

Señor Director,

Luz Clemencia de Páez
LUZ CLEMENCIA DE PÁEZ

C.C. No. 35.456.344 de Usaquén

T.P.A. No. 23.555

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No. M-2011-188572JGG

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PCT/US2009/039091 24.02.2011

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:
GRANT T. LANGTON
CONNOLLY BOVE LODGE & HUTZ, LLP
P.O.BOX 2207
WILMINGTON, DE 19899

PCT

NOTIFICATION OF TRANSMITTAL OF
INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Rule 71.1)

Date of mailing
(day/month/year)

24 FEB 2011

Applicant's or agent's file reference

70265-00084

IMPORTANT NOTIFICATION

International application No.

PCT/US09/39091

International filing date (day/month/year)

01 April 2009 (01.04.2009)

Priority date (day/month/year)

02 April 2008 (02.04.2008)

Applicant

AMERON INTERNATIONAL

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the *PCT Applicant's Guide*.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed invention is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the IPEA/ US

Mail Stop PCT, Attn: IPEA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No.

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James F. Hook

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Form PCT/IPEA/416 (January 2004)

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PCT/US2009/039091 24.02.2011

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 70265-00084	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/US09/39091	International filing date (day/month/year) 01 April 2009 (01.04.2009)	Priority date (day/month/year) 02 April 2008 (02.04.2008)	
International Patent Classification (IPC) or national classification and IPC IPC: F16L 9/02(2006.01) USPC: 138/143			
Applicant AMERON INTERNATIONAL			
1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet. 3. This report is also accompanied by ANNEXES, comprising: a. ☒ (sent to the applicant and to the International Bureau) a total of <u>4</u> sheets, as follows: ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).			
4. This report contains indications relating to the following items: ☒ Box No. I Basis of the report ☐ 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 Article 35(2) 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			
Date of submission of the demand 02 February 2010 (02.02.2010)		Date of completion of this report 13 February 2011 (13.02.2011)	
Name and mailing address of the IPEA/ US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No.		Authorized officer James F. Hook Telephone No. (571) 272-1000	

Form PCT/IPEA/409 (cover sheet)(April 2007)

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/US09/39091

Box No. I Basis of the report

1. With regard to the language, this report is based on:

- ☒ the international application in the language in which it was filed.
- ☐ a translation of the international application into English, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3(a) and 23.1(b))
- ☐ publication of the international application (under Rule 12.4(a))
- ☐ international preliminary examination (under Rules 55.2(a) and/or 55.3(a))

2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

- ☐ the international application as originally filed/furnished
- ☒ the description:
 pages 1-36 as originally filed/furnished
 pages* NONE received by this Authority on _____
 pages* NONE received by this Authority on _____
- ☒ the claims:
 pages NONE as originally filed/furnished
 pages* NONE as amended (together with any statement) under Article 19
 pages* 7/10-10/10 received by this Authority on 16 February 2010 (16.02.2010)
 pages* NONE received by this Authority on _____
- ☒ the drawings:
 pages 1-4 as originally filed/furnished
 pages* NONE received by this Authority on _____
 pages* NONE received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☒ The amendments have resulted in the cancellation of:

- ☒ the description, pages None
- ☒ the claims, Nos. None
- ☒ the drawings, sheets/figs None
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

5. ☐ This report has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 70.2(e)).

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/US09/39091

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			
1. Statement			
Novelty (N)	Claims <u>2-4, 7, 12-14, 16, 19, 22, 23, 29, 31</u>		YES
	Claims <u>1, 5, 6, 8-11, 15, 17, 18, 20, 21, 24-28, 30</u>		NO
Inventive Step (IS)	Claims <u>NONE</u>		YES
	Claims <u>1-31</u>		NO
Industrial Applicability (IA)	Claims <u>1-31</u>		YES
	Claims <u>NONE</u>		NO
2. Citations and Explanations (Rule 70.7)			
Claims 1, 5, 6, 8-11, 15, 17, 18, 20, 21, 24-28, and 30 lack novelty under PCT Article 33(2) as being anticipated by Sadoulet (FR 1,264,614). The reference to Sadoulet discloses the recited annular concrete or motor liner forming the inside diameter of the pipe (page 1 left column 1st sentence of 3rd paragraph), a metal shell surrounding the liner, where the liner is in direct contact with the inside wall surface of the metal shell (page 2 left column 2nd paragraph), and where the liner is place in a state of compression by the metal shell (page 1 left column 1st sentence of 3rd paragraph), and the method of forming is also set forth, where the shell is shown as 1 defining the outer pipe, a base 9 member operatively connected with a bottom portion of the metal shell, a top member 10 operatively connected with a top portion of the metal shell, an inner mold member 5 positioned concentrically inwardly of the metal shell, an annular chamber 4 formed between the metal shell and the inner mold member suitable for accommodating a volume of concrete or mortar, means 6, 15 for introducing a fluid pressurizing medium into the mold and onto a surface of the concrete to cause the composition to expand the metal shell, the inner mold member diameter is reducible once the composition has reached a predetermined degree of cure (page 1 right column 3rd paragraph). Claims 2-4, 7, 12-14, 16, 19, 22, 23, 29, and 31 lack an inventive step under PCT Article 33(3) as being obvious over Sadoulet (FR 1,264,614). The reference to Sadoulet discloses all of the recited structure with the exception of various dimensions, however, such are considered to only require routine skill in the art to optimize dimensions and methods by use of routine experimentation. It would have been obvious to one skilled in the art to modify the dimensions and methods of selecting dimensions as such would only require routine skill in the art to use routine experimentation to arrive at optimum values as such only requires routine skill in the art. With respect to the arguments directed at the Sadoulet reference in regards to the modifications made to the claims, the argument that the reference does not teach pouring concrete into the mold, such is not persuasive when such is not being claimed, and with respect to the argument that a gas would not contact the surface of the concrete, such is not persuasive when there ends of the mold are sealed before the bladder is expanded and therefore inherently as the bladder is pressurized the gas trapped would contact the concrete as well as the bladder. ----- NEW CITATIONS -----			

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/US09/39091

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

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Claims

1. A pressure cast lined steel pipe comprising:
 - an annular concrete or mortar liner forming an inside diameter of the pipe;
 - a metal shell surrounding the liner;
 - wherein the liner is in direct contact with an inside wall surface of the metal shell, and wherein the liner is placed in a state of compression by the metal shell.
 2. The pipe as recited in claim 1 wherein the ratio of the wall thickness between the liner and the metal shell is in the range of from about 5:1 to 80:1.
 3. The pipe as recited in claim 1 wherein the ratio of the wall thickness between the liner and the metal shell is in the range of from about 10:1 to 50:1.
 4. The pipe as recited in claim 1 wherein the wall thickness of the metal shell is in the range of from about 0.06 to 0.75 inches, and the wall thickness of the liner is in the range of from about 1.5 to 10 inches.
 5. The pipe as recited in claim 1 further comprising a coating of dielectric material disposed along an outside surface of the metal shell.
 6. The pipe as recited in claim 1 wherein the concrete liner is formed in situ while an uncured concrete or mortar composition and the metal shell is pressurized to place the liner into a state of compression when the liner is cured and the pressure is released.
 7. A pressure cast lined steel pipe comprising:
 - an annular concrete or mortar liner forming an inside diameter of the pipe;
 - a metal shell surrounding the liner and having a wall thickness of about 0.06 to 0.75 inches;
 - wherein the liner has a wall thickness that is about 10 to 50 times that of the shell wall thickness, wherein the liner is in direct contact with an inside wall surface of the metal shell, and wherein the liner is placed in a state of compression by the metal shell.
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8. A method for making a pressure cast lined steel pipe comprising the steps of:
 - delivering a volume of a concrete or mortar composition into a mold formed between a metal shell along an outside diameter and a core member along an inside diameter, wherein the volume of concrete or mortar composition contacts both the shell and core member during the step of delivering;
 - subjecting the composition to a pressure force to expand the metal shell;
 - releasing the pressure force after the concrete or mortar composition has achieved a degree of cure to form a concrete or mortar liner,
 - wherein the step of releasing causes the metal shell to impose a compression force onto the liner; and
 - removing the core member from an inside diameter of the liner.
9. The method as recited in claim 8 wherein the step of subjecting the concrete or mortar composition to a pressure force involves contacting a surface of the concrete or mortar composition with a pressurized fluid.
10. The method as recited in claim 8 wherein the pressurized fluid is water.
11. The method as recited in claim 8 wherein the core member is provided in the form of an elastomeric member.
12. The method as recited in claim 8 wherein the core member is provided in the form of a collapsible rigid member.
13. The method as recited in claim 8 wherein the core member is provided in the form of a cylindrical rigid structure that can expand to permit formation of the liner and contract to permit removal of the core after pressure casting.
14. The method as recited in claim 8 wherein the core member is provided in the form of a high strength steel tube.
15. The method as recited in claim 8 wherein the core member is selected from the group of materials consisting of fiber-reinforced resin pipe, plastic pipe, and combinations thereof.

16. The method as recited in claim 8 wherein the concrete or mortar composition includes an expansive agent that with the metal shell contributes to impose a compressive force onto the liner.
17. The method as recited in claim 8 wherein the mold comprises an annular chamber that is oriented vertically.
18. A pressure cast lined steel pipe made according to the method recited in claim 8 wherein the concrete or mortar liner is in direct contact with an inside wall surface of the metal shell.
19. A pressure cast lined steel pipe made according to the method recited in claim 8 wherein the concrete or mortar liner has a wall thickness that is about 10 to 50 times the wall thickness of the steel shell.
20. A pressure cast assembly for making a lined steel pipe comprising:
 - a cylindrical metal shell defining an outer portion of the pipe;
 - a base member operatively connected with a bottom portion of the metal shell;
 - a top member operatively connected with a top portion of the metal shell;
 - an inner mold member positioned concentrically inwardly of the metal shell;
 - an annular chamber formed between the metal shell and inner mold member for accommodating a volume of a concrete or mortar composition therein; and
 - means for introducing a fluid pressurizing medium into the mold and into contact with a surface of the concrete or mortar composition to cause the composition to expand the metal shell;
 - wherein the inner mold member diameter is reducible once the composition has reached a determined degree of cure.
21. The pressure cast assembly as recited in claim 20 wherein the fluid pressurizing medium is water.
22. The pressure cast assembly as recited in claim 20 further comprising a displacement tube that is positioned concentrically inwardly of the inner mold member.

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23. The pressure cast assembly as recited in claim 20 wherein the fluid pressurizing medium is disposed within an annular fluid chamber formed between the displacement tube and the inner mold member.
24. The pressure cast assembly as recited in claim 23 wherein the pressure of the fluid pressurizing medium is approximately the same at the surface of the concrete or mortar composition as within the annular fluid chamber.
25. The pressure cast assembly as recited in claim 20 further comprising sealing means to contain the concrete or mortar composition within the annular chamber during a pressurizing operation using the fluid pressurizing medium.
26. The pressure cast assembly as recited in claim 20 wherein the top member includes a top ring positioned over an end of the metal shell.
27. The pressure cast assembly as recited in claim 26 wherein surface of the concrete or mortar composition before being pressurized is disposed above an end of the metal shell and is positioned within the top ring.
28. The pressure cast assembly as recited in claim 20 wherein the annular chamber is oriented vertically.
29. The pressure cast assembly as recited in claim 20 wherein the inner mold member is a rigid cylindrical member having opposed longitudinal edges that are movably controlled to reduce the member diameter.
30. The pressure cast assembly as recited in claim 20 wherein the inner mold member is an elastomeric member.
31. The pressure cast assembly as recited in claim 20 wherein the inner mold member is a rigid cylindrical member that can expand and contract a sufficient amount to permit forming the liner and releasing the liner therefrom.

REIVINDICACIONES MODIFICADAS

- PARA REALIZAR EL EXAMEN DE
PATENTABILIDAD

Reivindicaciones

1. Un caño de acero recubierto moldeado a presión, caracterizado porque comprende:

un recubrimiento de concreto o mortero anular que forma un diámetro interno del caño;

una carcasa metálica que rodea el recubrimiento;

en tanto el recubrimiento está en contacto directo con una superficie de pared interna de la carcasa metálica, y se encuentra en estado de compresión mediante la carcasa metálica.

2. El caño de acuerdo a la Reivindicación 1, caracterizado porque la relación del espesor de pared entre el recubrimiento y la carcasa metálica oscila aproximadamente entre 5:1 y 80:1.

3. El caño de acuerdo a la Reivindicación 1, caracterizado porque la relación del espesor de pared entre el recubrimiento y la carcasa metálica oscila aproximadamente entre 10:1 y 50:1.

4. El caño de acuerdo a la Reivindicación 1, caracterizado porque el espesor de pared de la carcasa metálica oscila aproximadamente entre 0.06 y 0.75 pulgadas, y el espesor de pared del recubrimiento oscila aproximadamente entre 1.5 y 10 pulgadas.

5. El caño de acuerdo a la Reivindicación 1, caracterizado porque comprende además un recubrimiento de material dieléctrico dispuesto a lo largo de la superficie externa de la carcasa metálica.

6. El caño de acuerdo a la Reivindicación 1, caracterizado porque el recubrimiento de concreto se realiza in situ mientras una composición de concreto o mortero sin curar y la carcasa metálica son presurizadas para colocar al recubrimiento en un estado de compresión cuando el recubrimiento se cura y la presión es liberada.

7. Un caño de acero recubierto moldeado a presión, caracterizado porque comprende:

un recubrimiento de concreto o mortero anular que forma un diámetro interno del caño;

a carcasa metálica que rodea el recubrimiento y posee un espesor de pared que oscila aproximadamente entre 0.06 y .75 pulgadas;

en tanto el recubrimiento tiene un espesor de pared que representa aproximadamente entre 10 y 50 veces el espesor de la pared de la carcasa, en tanto el recubrimiento está en contacto directo con la superficie de pared interna de la carcasa metálica, en tanto el recubrimiento es colocado en un estado de compresión por acción de la carcasa metálica.

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8. Un método de fabricación de un caño de acero recubierto moldeado a presión caracterizado porque comprende los pasos de:

suministrar un volumen de una composición de concreto o mortero a un molde formado entre una carcasa metálica a lo largo de un diámetro externo y un elemento central a lo largo de un diámetro interno, en donde el volumen de la composición de concreto o mortero contacta la carcasa y el elemento central durante la etapa de suministro;

someter la composición a una fuerza de compresión para expandir la carcasa metálica;

liberar la fuerza de compresión una vez que la composición de concreto o mortero ha alcanzado cierto grado de curado para formar un recubrimiento de concreto o mortero, en tanto el paso de liberación hace que la carcasa metálica imponga una fuerza de compresión sobre el recubrimiento; y

extraer el elemento central de un diámetro interno del recubrimiento.

9. El método de acuerdo a la Reivindicación 8, caracterizado porque el paso de sometimiento de la composición de concreto o mortero a una fuerza de compresión comprende contactar una superficie de la composición de concreto o mortero con un fluido presurizado.

10. El método de acuerdo a la Reivindicación 8, caracterizado porque el fluido presurizado es agua.

11. El método de acuerdo a la Reivindicación 8, caracterizado porque el elemento central es provisto en la forma de un elemento elastomérico.

12. El método de acuerdo a la Reivindicación 8, caracterizado porque el elemento central es provisto en la forma de un elemento rígido colapsable.

13. El método de acuerdo a la Reivindicación 8, caracterizado porque el elemento central es provisto en la forma de una estructura rígida cilíndrica que puede expandirse para permitir la formación del recubrimiento y contraerse para permitir la extracción del centro luego del moldeo a presión.

14. El método de acuerdo a la Reivindicación 8, caracterizado porque el elemento central es provisto en la forma de un elemento de un tubo de acero de alta resistencia.

15. El método de acuerdo a la Reivindicación 8, caracterizado porque el elemento central es seleccionado del grupo de materiales integrado por tubo de resina reforzada con fibra, tubo plástico, y combinaciones de los mismos.

16. El método de acuerdo a la Reivindicación 8, caracterizado porque la composición de concreto o mortero incluye un agente de expansión que con la carcasa metálica contribuye a imponer una fuerza de compresión sobre el recubrimiento.

17. El método de acuerdo a la Reivindicación 8, caracterizado porque el molde comprende una cámara anular que está orientada verticalmente.

18. Un caño de acero recubierto moldeado a presión de acuerdo al método de la Reivindicación 8, caracterizado porque el recubrimiento de concreto o mortero está en contacto directo con la superficie de la pared interna de la carcasa metálica.

19. Un caño de acero recubierto moldeado a presión de acuerdo al método de la Reivindicación 8, caracterizado porque el recubrimiento de concreto o mortero tiene un espesor que representa aproximadamente entre 10 y 50 veces el espesor de pared de la carcasa de acero.

20. Un conjunto de moldeo a presión para fabricar un caño de acero recubierto, caracterizado porque comprende:

una carcasa metálica cilíndrica que define una porción externa del caño;

un elemento base operativamente conectado a una porción inferior de la carcasa metálica;

un elemento superior operativamente conectado a una porción superior de la carcasa metálica;

un elemento de molde interno dispuesto concéntricamente hacia el interior de la carcasa metálica;

una cámara anular formada entre la carcasa metálica y el elemento de molde interno para contener cierta cantidad de una composición de concreto o mortero; y

un medio para introducir un medio de presurización fluido en el molde y en contacto con una superficie de la composición de concreto o mortero para hacer que la composición expanda la carcasa metálica;

en tanto el diámetro del elemento de molde interno puede reducirse una vez que la composición ha alcanzado un grado determinado de curado.

21. El conjunto de moldeo a presión de acuerdo a la Reivindicación 20, caracterizado porque el medio de presurización fluido es agua.

22. El conjunto de moldeo a presión de acuerdo a la Reivindicación 20, caracterizado porque comprende además un tubo de desplazamiento que se dispone concéntricamente hacia el interior del elemento de molde interno.

23. El conjunto de moldeo a presión de acuerdo a la Reivindicación 20, caracterizado porque el medio de presurización fluido está dispuesto dentro de una cámara de fluido anular formada entre el tubo de desplazamiento y el elemento de molde interno.

24. El conjunto de moldeo a presión de acuerdo a la Reivindicación 23, caracterizado porque la presión del medio de presurización fluido es aproximadamente la misma en la superficie de la composición de concreto o mortero que dentro de la cámara de fluido anular.

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- 25.** El conjunto de moldeo a presión de acuerdo a la Reivindicación 20, caracterizado porque comprende además un medio de sellado para contener la composición de concreto o mortero dentro de la cámara anular durante una operación de presurización usando el medio de presurización fluido.
- 26.** El conjunto de moldeo a presión de acuerdo a la Reivindicación 20, caracterizado porque el elemento superior incluye un anillo superior dispuesto sobre un extremo de la carcasa metálica.
- 27.** El conjunto de moldeo a presión de acuerdo a la Reivindicación 26, caracterizado porque la superficie de la composición de concreto o mortero antes de ser presurizada se dispone por sobre un extremo de la carcasa metálica y dentro del anillo superior.
- 28.** El conjunto de moldeo a presión de acuerdo a la Reivindicación 20, caracterizado porque la cámara anular está orientada verticalmente.
- 29.** El conjunto de moldeo a presión de acuerdo a la Reivindicación 20, caracterizado porque el elemento de molde interno es un elemento cilíndrico rígido con bordes longitudinales opuestos cuyo desplazamiento se controla para reducir el diámetro del elemento.
- 30.** El conjunto de moldeo a presión de acuerdo a la Reivindicación 20, caracterizado porque el elemento de molde interno es un elemento elastomérico.
- 31.** El conjunto de moldeo a presión de acuerdo a la Reivindicación 20, caracterizado porque el elemento de molde interno es un elemento cilíndrico rígido que puede expandirse y contraerse suficientemente para permitir el moldeo del recubrimiento y la liberación del recubrimiento del mismo.

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Bogotá D.C.,

Doctor(a)
SUAREZ DE PAEZ LUZ CLEMENCIA
Apoderado(a) y/o Representante de
AMERON INTERNATIONAL CORPORATION

REFERENCIA	Radicación No.	10 121741
	Solicitud internacional	PCT/US2009/039091
	Fecha inicio fase nacional	02/11/2010
	Trámite	11
	Evento	379
	Actuación	416
	Oficio No.	12648
	Folios	1

Teniendo en cuenta que la solicitud de privilegio de patente que se tramita bajo el expediente indicado en la referencia, reúne los requisitos de forma establecidos en la Decisión 486 de la Comisión de la Comunidad Andina, el Tratado de Cooperación en Materia de Patentes (PCT), el Reglamento y la Circular Única de la Superintendencia de Industria y Comercio, se envía el extracto de la solicitud a la Oficina de Comunicaciones para efecto de su publicación en la Gaceta de Propiedad Industrial.

Cúmplase
Dado en Bogotá DC,

06 ABR. 2011



JOSE LUIS SALAZAR LOPEZ
Director de Nuevas Creaciones (C)

jfernand