



No. 13-200299- -00012-0000

Fecha: 2015-02-05 14:58:52 Dep. 2003 G. TRAB. VIA. GUI
Tra 11 PATENTE IYII Evo: 378 FASE NACIONAL I
Act. 412 REPOSPRESRECU Folios: 20**Clarke, Model****COLOMBIA**

MF

P-3884

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
SUPERINTENDENTE DE INDUSTRIA Y COMERCIO

E. S. D.

Re: Expediente No. **13-200.299**
Solicitud de patente a nombre de **SHUDAREK TODD ALEXANDER / WALCOTT WAYNE / RUTHER WESLEY**

Yo, SILVANA MARIA LOPEZ DÍAZ, identificada como aparece al pie de mi firma, domiciliada en la carrera 11 A No. 86-53, piso 6, y actuando como apoderada de **SHUDAREK TODD ALEXANDER, WALCOTT WAYNE y RUTHER WESLEY**, domiciliados en Estados Unidos de América, solicitantes de la patente de la referencia, interpongo recurso de reposición contra la resolución No. **78601** emitida el 19 de diciembre 2014 por el Superintendente de Industria y Comercio, por medio de la cual se niega el privilegio de patente de invención para la solicitud contenida en el expediente de la referencia.

Con fundamento en la facultad que confiere el artículo 34 de la Decisión 486 al solicitante para modificar la solicitud de patente en cualquier momento del trámite, presento junto con este memorial un nuevo capítulo reivindicatorio, el cual consta de 8 reivindicaciones y reemplaza completamente el capítulo presentado anteriormente.

Cabe aclarar que el nuevo capítulo reivindicatorio que consta de 8 reivindicaciones y la materia contenida en dichas reivindicaciones corresponde a la misma materia de las reivindicaciones allegadas el 26 de septiembre de 2014 en respuesta al oficio No. 8027 notificado por fijación en lista el 8 de julio de 2014, con la diferencia que se modificó la antigua reivindicación 1 para incluir las características técnicas descritas en la antigua reivindicación 2 y definir de una forma más clara y específica el inductor reclamado.

En relación con los términos objetados por el examinador en las antiguas reivindicaciones 1, 2 y 6, se clara que se eliminaron los siguientes términos “*otro material conveniente*” y “*una proximidad suficiente*”. Las expresiones “*alta permeabilidad*” y “*permeabilidad relativa conveniente*” se mantienen en el capítulo reivindicatorio ya que dicha permeabilidad relativa conveniente es definida en el mismo capítulo reivindicatorio, particularmente en la nueva reivindicación 5, de tal forma que las reivindicaciones que contienen dicho término son claras para una persona del oficio normalmente versada en la técnica. En este sentido, el solicitante manifiesta que el nuevo capítulo reivindicatorio cumple con los lineamientos establecidos en el artículo 30 de la Decisión 486/00.

Atentamente nos permitimos decir que se adjunta recibo por tasa de modificación y no por reivindicaciones adicionales, toda vez que el nuevo capítulo reivindicatorio que contiene 8 reivindicaciones tiene menor número de cláusulas que el originalmente presentado y es en esencia el mismo pero más limitado y definido con mayor claridad.

1. FUNDAMENTOS DEL RECURSO

Mi mandante se permite manifestar a ese despacho que se reafirma en todos y cada uno de los argumentos que hacen parte integrante de la respuesta al oficio No. 8027 notificado por fijación en lista el 8 de julio de 2014, presentada ante ese Despacho el 26 de septiembre de 2014.

En relación con los argumentos presentados por ese despacho en la resolución impugnada No. 78601 emitida el 19 de diciembre de 2014, es necesario señalar que carecen de un enfoque adecuado de conformidad con las normas, jurisprudencia y reglas técnicas que existen para evaluar el nivel inventivo de una invención.

1.1 La indebida interpretación del artículo 18 de la Decisión 486/00

Es deseo del solicitante presentar argumentos contra las declaraciones de esa Superintendencia indicando como primera medida que el examinador no realizó una adecuada interpretación del artículo 18 de la Decisión 486/00 y parte de premisas erradas, en cuanto a la supuesta obviedad de la materia objeto de la presente invención, realizando un equivocado análisis del requisito en cuestión, para finalmente negar sin justificación la patente para la solicitud en comento.

En este sentido, volvemos sobre el particular que el artículo 18 de la Decisión 486/00 determina que *“una invención tiene nivel inventivo, si para una **persona del oficio normalmente versada en la materia técnica** correspondiente, esa invención no hubiese resultado obvia ni se hubiese derivado de manera evidente del estado de la técnica”*. (El subrayado es nuestro).

Lo anterior significa que el análisis de nivel inventivo **NO** es una comparación de los objetos de las anterioridades y la solicitud en estudio. El análisis de nivel inventivo **debe demostrar** la obviedad de la invención y establecer cómo ésta no contiene un salto cualitativo, que demuestre su altura inventiva, teniendo en cuenta que se hace **necesario demostrar** que la invención analizada carece de nivel inventivo y hubiese sido obvia para una persona versada en la materia.

Considerando la definición anterior, el solicitante desea se tengan en cuenta los siguientes argumentos así como los argumentos inicialmente presentados en el expediente, los cuales dan soporte a los dichos siguientes argumentos y demuestran que la solicitud de la referencia cumple con los requisitos de nivel inventivo.

En la resolución impugnada se establece la falta de nivel inventivo de las antiguas reivindicaciones 1 a 9 a la luz las enseñanzas técnicas descritas en los documentos US 5,774,311 (D1), US 2009/0295524 (D2) y US 2004/0080978 (D3).

Específicamente, el examinador indica que reivindicación 1 no es inventiva a la luz de la combinación de las enseñanzas técnicas descritas en cualquiera de los documentos D1, D2 o D3, cada uno por separado, y los conocimientos técnicos de una persona del oficio normalmente versada en la técnica.

A este respecto se indica al examinador que la nueva reivindicación 1 de la presente solicitud describe un inductor que comprende “un núcleo, una pieza de entrehierro de núcleo de alta permeabilidad (FAP) colocada dentro del núcleo del inductor, de tal manera que una trayectoria de flujo magnético del núcleo del inductor pasa a través de la FAP; donde la FAP es distinta del núcleo; y una pieza de entrehierro metálico (MAP), donde la MAP es distinta del núcleo y está colocada i) dentro del núcleo del inductor de tal manera que el flujo magnético pasa a través de la MAP, o ii) en proximidad a la FAP; donde la FAP comprende un material de potencia de polvo de múltiples aleaciones que contiene 50% en peso de níquel y 20% en peso de hierro, la MAP que se calienta con el paso del flujo magnético a través de la MAP, que calienta la FAP”

Se aclara al examinador que la característica del MAP que consiste en que se calienta con el paso del flujo magnético a través de la MAP, lo cual calienta la FAP, constituye una característica técnica esencial del inductor reclamado.

Además, se resalta que en la nueva reivindicación 1 se indica que el inductor comprende los elementos i) núcleo, ii) pieza de entrehierro de núcleo de alta permeabilidad (FAP), y iii) pieza de entrehierro metálico (MAP), donde la FAP y la MAP son distintas del núcleo del inductor.

Por el contrario, como el mismo examinador lo reconoce en la resolución impugnada, la FAP descrita en la presente solicitud correspondería al elemento 22 del documento D1, el cual es el mismo núcleo. De esta forma, el documento D1 indica que el FAP y el núcleo son el mismo elemento.

En relación con el documento D2, se encuentra que este no menciona o sugiere que la capa de entrehierro de alta permeabilidad (elemento 54 en D2) sea sometida a calentamiento. Adicionalmente, es deseo del solicitante llamar la atención del examinador en relación con que la definición de “capa de material que incluye NiZn y polvo de hierro” (página 1, párrafo 7) define la composición del núcleo y no de la estructura 54, es decir la FAP correspondiente.

Con respecto al documento D3, se encuentra que dicho documento describe un elemento de almacenamiento magnético que minimiza las pérdidas de potencia. Sin embargo, en dicho documento la estructura 18, considerada erróneamente por el examinador como el elemento FAP en la resolución impugnada, hace referencia en realidad a un núcleo y no al elemento definido por el solicitante como “una pieza de entrehierro de núcleo de alta permeabilidad (FAP)”, que tiene estructuras diferentes de las del núcleo (como se define en las nuevas reivindicaciones 1 a 8).

De esta forma, la comparación de las características técnicas de la presente invención y las enseñanzas descritas en los documentos D1, D2 y D3 llevada a cabo por el examinador en la resolución impugnada es equivocada, ya que considera erróneamente los elementos de los inductores descritos en tales documentos.

Así, se demuestra que ninguno de los documentos D1, D2 o D3 citados por el examinador, ni en forma individual ni en combinación, describe TODAS las características técnicas del inductor reclamado. De hecho, las enseñanzas descritas en

estos documentos alejarían a una persona del oficio de la materia objeto de la presente invención. Por lo tanto, no es posible que una persona del oficio normalmente versada en la técnica hubiera podido a partir de tales documentos derivar en forma obvia el inductor descrito en la reivindicación 1 con TODAS sus características técnicas. De esta forma, es claro el paso inventivo que significó para el solicitante el desarrollo del inductor.

En consecuencia, se manifiesta que la nueva reivindicación 1, y sus reivindicaciones dependientes 2 a 8, por lo menos por dependencia, tienen nivel inventivo en concordancia con los lineamientos incluidos en el artículo 18 de la Decisión 486/00.

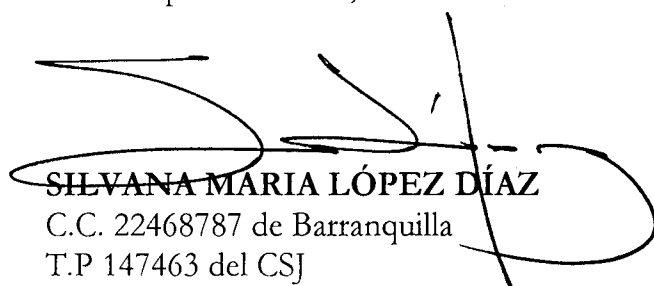
Adicional a lo anterior, es deseo del solicitante indicar que la solicitud de patente equivalente en Estados Unidos de América ha sido concedida por la Oficina Estadounidense de Patentes y Marcas (USPTO). Se adjunta al presente memorial copia de la notificación de aceptación emitida por la USPTO; y de las reivindicaciones declaradas como patentables por dicha Oficina.

Así, aunque el solicitante reconoce el principio de independencia de cada Oficina de Patentes, resulta sorprendente que otras Oficinas hayan reconocido el cumplimiento de los requisitos de patentabilidad de la presente invención, mientras únicamente la Oficina de Patentes en Colombia se aparta del criterio unánime de tales Oficinas, siendo la novedad, el nivel inventivo y la aplicación industrial conceptos universales.

Teniendo en cuenta lo dicho anteriormente, solicito a usted lo siguiente:

- a) Que de conformidad con lo previsto por los artículos 3, 42 y 80 del Código de Procedimiento Administrativo y de lo Contencioso Administrativo se consideren y se resuelvan **TODOS** los argumentos y **TODAS** las cuestiones planteadas así como las que aparezcan con motivo de este recurso,
- b) Que se revoque la resolución No. 78601 del 19 de diciembre de 2014 expedida por el Superintendente de Industria y Comercio, y se proceda a conceder el privilegio de patente de invención a la solicitud de mi mandante

Señor Superintendente,


SILVANA MARIA LÓPEZ DÍAZ
C.C. 22468787 de Barranquilla
T.P 147463 del CSJ
notificaciones@clarkemodet.com.co

ANEXOS

- Notificación de Aceptación de solicitud equivalente en Estados Unidos de América No. 13/357,476 y copia de las reivindicaciones concedidas.
- Nuevo pliego reivindicatorio conformado por 8 reivindicaciones.
- Recibo de pago de la tasa oficial por concepto de modificaciones de solicitud en trámite por \$132.000,00.

DIRECCIÓN DE NUEVAS CREACIONES
MODIFICACIONES Y/O CORRECCIONES

1. Identificación del Trámite

☐ Error material

☒ Modificación a una Solicitud en trámite

☒ Patente de Invención

☐ Patente de Modelo de Utilidad

☐ Registro de Diseño Industrial

☐ Esquema de Trazado de Circuitos Integrados

2. Datos del solicitante

Persona Natural ☐

Persona Jurídica ☒

1. SHUDAREK TODD ALEXANDER 2. WALCOTT WAYNE 3. RUTHER WESLEY

Nombre o denominación / Nombre o razón social completa

Nombre representante legal

Tipo de empresa

Micro ☐

Pequeña ☐

Mediana ☐

Otra ☐

Documento de identificación:

☐ C.C.

☐ C.E.

☐ NIT

☐ Otro

Número

Nacionalidad/País de constitución	Dirección y domicilio del titular	Ciudad
1. Estados Unidos de América	Great Forest Drive,	West Bend, WI 53090
2. Estados Unidos de América	W302 n6658 Lilian Drive,	Hartland, WI 53029
3. Estados Unidos de América	W4980 Hilltop Road,	Fredonia, WI 53021

☐

Autorizo expresamente a la Superintendencia de Industria y Comercio para que todas las comunicaciones sean enviadas a través de la dirección de correo electrónico

3. Datos del apoderado:

SILVANA MARIA LÓPEZ DÍAZ

. C.C. 22.468.787

147463 CSJ

Apellidos y Nombre

Documento de identificación

Tarjeta profesional

Dirección y domicilio		Ciudad
Carrera 11 No. 86-53, Piso 6, Bogotá D.C., Colombia		Bogotá D.C.
Dirección electrónica	No. Fax	Número telefónico
notificaciones@clarkemodet.com.co	6350824	6181088

En caso de haber presentado poder general para asuntos que se adelanten ante la Delegatura de Propiedad Industrial, sirvase indicar el número de su radicación o protocolo de poder general

4. Datos del trámite

Corrección:

Expediente No. 13-200.299

Aparece _____

Debe ser _____

Modificación:

Presentación Solicitud Divisional.

Modificación al capítulo descriptivo.

☐ _____

☒ Modificación al capítulo Reivindicatorio: Presento junto con este recurso nuevo capítulo reivindicatorio.

Modificación al resumen.

☐ _____

Modificación a los dibujos.

☐ _____

Modificación al solicitante.

5. Anexos

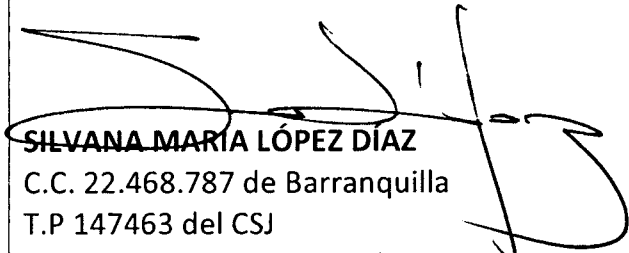
☒ Comprobante de pago de la tasa para la presentación de la corrección y/o modificación

☐ Poder, si fuere el caso.

☒ Documento que contiene las modificaciones o correcciones.

☐ Copia de la solicitud y sus anexos en formato magnético.

6. Firma


SILVANA MARIA LÓPEZ DÍAZ

C.C. 22.468.787 de Barranquilla

T.P 147463 del CSJ

notificaciones@clarkemodet.com.co

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO

NIT : 800.176.089-2

- / -



RECIBO DE CAJA

No. 15 - 0013125

Bogotá D.C., Febrero 04 de 2015 - 14:44:43

RECIBIDO DE : CLARKE MODET

NI 830.008.643

***** Soporte del Pago *****

TIPO PAGO	BANCO	CUENTA	No. PAGO	FECHA PAGO	VR. PAGO
RECIBO DE CA	999999999	164	05/01/2015		22.000.00
RECIBO DE CA	999999999	165	05/01/2015		22.000.00
RECIBO DE CA	999999999	8906	22/01/2015		218.000.00
RECIBO DE CA	999999999	8916	22/01/2015		340.000.00
RECIBO DE CA	999999999	8917	22/01/2015		340.000.00
RECIBO DE CA	999999999	8918	22/01/2015		340.000.00
RECIBO DE CA	999999999	8919	22/01/2015		340.000.00
RECIBO DE CA	999999999	8920	22/01/2015		340.000.00
RECIBO DE CA	999999999	8921	22/01/2015		340.000.00
RECIBO DE CA	999999999	8922	22/01/2015		340.000.00

***** Conceptos Pagados *****

CANT.	RENTISTICO	CONCEPTO	Vr.UNDITARIO	Vr.CONCEPTO
1	50005-01-03 CAMBIO DE MODALIDAD Y MODIFICACIONES	EN CREACION CORRECCION A SOLICITUD EN TRAMITE / MODIFICA	132.000.00	132.000.00
				\$132.000.00

SON: **CIENTO TREINTA Y DOS MIL PESOS MONEDA CORRIENTE***

Responsable: _____

Recibo de Caja Aplicado al Expediente No. _____

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO



No. 13-200299-00012-0000

Fecha 2015-02-05 14:58:52 Dep. 2003 G. TRAB. VIA GUI
Tra 11 PATENTEIYII Eve: 378 FASENACIONALI
Act. 412 REPOSPRESRECU Folios: 20

Sede Central: Carrera 13 No. 27 - 00 Pisos 3,4,5 y 10 Bogotá, D.C.- Colombia

Web: www.sic.gov.co e-mail: info@sic.gov.co Conmutador: (571) 5870000 Fax: (571) 5870284 Línea: 018000-910165 Call Center: (571) 6513240

Febrero 4 de 2015 - 14:44:47

7

REIVINDICACIONES

1. Un inductor, que comprende:

un núcleo,

una pieza de entrehierro de núcleo de alta permeabilidad (FAP) colocada dentro del núcleo del inductor, de tal manera que una trayectoria de flujo magnético del núcleo del inductor pasa a través de la FAP; donde la FAP es distinta del núcleo; y

una pieza de entrehierro metálico (MAP), donde la MAP es distinta del núcleo y está colocada i) dentro del núcleo del inductor de tal manera que el flujo magnético pasa a través de la MAP, o ii) en proximidad a la FAP;

donde la FAP comprende un material de potencia de polvo de múltiples aleaciones que contiene 50% en peso de níquel y 20% en peso de hierro

la MAP que se calienta con el paso del flujo magnético a través de la MAP, que calienta la FAP.

2. El inductor de acuerdo con la reivindicación 1, donde el inductor adicionalmente comprende un aislante, donde un aislante se coloca a lo largo de una parte de flujo magnético que adicionalmente ajusta una inductancia del inductor.

3. El inductor de acuerdo con la reivindicación 1, donde la FAP comprende un material de ferrita.

4. El inductor de acuerdo con la reivindicación 3, donde el material de ferrita blando se selecciona de un grupo que consiste de material de ferrita de níquel-zinc, de material de ferrita de magnesio-zinc, y de material de ferrita de manganeso-zinc.

5. El inductor de acuerdo con la reivindicación 1, donde la FAP comprende un material que tiene permeabilidad relativa conveniente en un intervalo de 14 a 550.

6. El inductor de acuerdo con la reivindicación 1, donde la FAP comprende una primera parte de la FAP y una segunda parte de la FAP donde una primera parte de la FAP y una segunda parte de la FAP son estructuras separadas.

7. El inductor de acuerdo con la reivindicación 6, donde una primera parte de la FAP difiere de una segunda parte de la FAP en una de las siguientes características: composición, tamaño, y forma.

8. El inductor de acuerdo con la reivindicación 7, donde una primera parte de la FAP tiene una primera forma y una segunda parte de la FAP tiene

una segunda forma, y donde la primera forma es complementaria a la segunda forma de modo que una primera parte de la FAP se interbloquea con una segunda parte de la FAP para ensamblar la FAP.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

67395 7590 01/15/2014
GREENBERG TRAURIG (NJ)
200 PARK AVE.
P.O. BOX 677
FLORHAM PARK, NJ 07932

EXAMINER	
NGUYEN, TUYEN T	
ART UNIT	PAPER NUMBER
2837	
DATE MAILED: 01/15/2014	

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/357,476	01/24/2012	Todd Shudarek	102146.011101	3255
TITLE OF INVENTION: HARMONIC MITIGATION DEVICES AND APPLICATIONS THEREOF				

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0	\$960	04/15/2014

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.
If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.
If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".
For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

10

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or **Fax** (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

67395 7590 01/15/2014
GREENBERG TRAUIG (NJ)
200 PARK AVH.
P.O. BOX 677
FLORHAM PARK, NJ 07932

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

	(Depositor's name)
	(Signature)
	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/357,476	01/24/2012	Todd Shudarek	102146.011101	3255

TITLE OF INVENTION: HARMONIC MITIGATION DEVICES AND APPLICATIONS THEREOF

APPL. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0	\$960	04/15/2014

EXAMINER	ART UNIT	CLASS-SUBCLASS
NGUYEN, TUYEN T	2837	336-179000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

☐ Applicant certifying micro entity status. See 37 CFR 1.29
☐ Applicant asserting small entity status. See 37 CFR 1.27
☐ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____
Typed or printed name _____ Registration No. _____



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APPLICATION NO.	FILED DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/357,476	01/24/2012	Todd Shudarek	102146.011101	3255

67395759001/15/2014

GREENBERG TRAURIG (NJ)
200 PARK AVE.
P.O. BOX 677
FLORHAM PARK, NJ 07932

EXAMINER	
NGUYEN, TUYEN T	

ART UNIT	PAPER NUMBER
2837	

DATE MAILED: 01/15/2014

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
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3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 13/357,476	Applicant(s) SHUDAREK ET AL.	
	Examiner TUYEN NGUYEN	Art Unit 2837	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 10/22/2013.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

3. ☒ The allowed claim(s) is/are 1-14. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a) ☐ All b) ☐ Some *c) ☐ None of the:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)	5. ☐ Examiner's Amendment/Comment
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____	6. ☐ Examiner's Statement of Reasons for Allowance
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	7. ☐ Other _____
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____	

/TUYEN NGUYEN/ Primary Examiner, Art Unit 2837	
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BIB DATA SHEET

CONFIRMATION NO. 3255

SERIAL NUMBER 13/357,476	FILING or 371(c) DATE 01/24/2012 RULE	CLASS 336	GROUP ART UNIT 2837	ATTORNEY DOCKET NO. 102146.011101		
APPLICANTS INVENTORS Todd Shudarek, West Bend, WI; Wayne Walcott, Hartland, WI; Wesley Ruther, Fredonia, WI; ** CONTINUING DATA ***** This appln claims benefit of 61/435,520 01/24/2011 and claims benefit of 61/450,693 03/09/2011 ** FOREIGN APPLICATIONS ***** ** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** 02/03/2012						
Foreign Priority claimed ☐ Yes ☒ No 35 USC 119(a-d) conditions met ☐ Yes ☒ No Verified and Acknowledged <u>/TUYEN T NGUYEN/</u> Examiner's Signature		☐ Met after Allowance <u>/TN/</u> Initials	STATE OR COUNTRY WI	SHEETS DRAWINGS 43	TOTAL CLAIMS 18	INDEPENDENT CLAIMS 1
ADDRESS GREENBERG TRAURIG (NJ) 200 PARK AVE. P.O. BOX 677 FLORHAM PARK, NJ 07932 UNITED STATES						
TITLE HARMONIC MITIGATION DEVICES AND APPLICATIONS THEREOF						
FILING FEE RECEIVED 1380	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:			☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit		

Issue Classification 	Application/Control No.	Applicant(s)/Patent under Reexamination	
	13/357,476	SHUDAREK ET AL.	
	Examiner	Art Unit	
	TUYEN NGUYEN	2837	

ISSUE CLASSIFICATION									
ORIGINAL				CROSS REFERENCE(S)					
CLASS		SUBCLASS		CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)				
336		212							
INTERNATIONAL CLASSIFICATION									
H	0	1	F						
				27/24					
				/					
				/					
				/					
				/					
none (Assistant Examiner) (Date)				/Tuyen Nguyen/ Primary Examiner 12/28/2013 (Primary Examiner) (Date)				Total Claims Allowed: 14	
(Legal Instruments Examiner) (Date)								O.G. Print Claim(s) 1	O.G. Print Fig. 2A

☒ Claims renumbered in the same order as presented by applicant										☐ CPA		☐ T.D.		☐ R.1.47	
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
	1		31		61		91		121		151		181		
	2		32		62		92		122		152		182		
	3		33		63		93		123		153		183		
	4		34		64		94		124		154		184		
	5		35		65		95		125		155		185		
	6		36		66		96		126		156		186		
	7		37		67		97		127		157		187		
	8		38		68		98		128		158		188		
	9		39		69		99		129		159		189		
	10		40		70		100		130		160		190		
	11		41		71		101		131		161		191		
	12		42		72		102		132		162		192		
	13		43		73		103		133		163		193		
	14		44		74		104		134		164		194		
	15		45		75		105		135		165		195		
	16		46		76		106		136		166		196		
	17		47		77		107		137		167		197		
	18		48		78		108		138		168		198		
	19		49		79		109		139		169		199		
	20		50		80		110		140		170		200		
	21		51		81		111		141		171		201		
	22		52		82		112		142		172		202		
	23		53		83		113		143		173		203		
	24		54		84		114		144		174		204		
	25		55		85		115		145		175		205		
	26		56		86		116		146		176		206		
	27		57		87		117		147		177		207		
	28		58		88		118		148		178		208		
	29		59		89		119		149		179		209		
	30		60		90		120		150		180		210		

Search Notes 	Application/Control No.	Applicant(s)/Patent under Reexamination	
	13/357,476	SHUDAREK ET AL.	
	Examiner	Art Unit	
	TUYEN NGUYEN	2837	

SEARCHED			
Class	Subclass	Date	Examiner
336	200, 212, 178, 232	12/28/2013	TN

INTERFERENCE SEARCHED			
Class	Subclass	Date	Examiner
same as above		12/28/2013	TN

SEARCH NOTES (INCLUDING SEARCH STRATEGY)		
	DATE	EXMR

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing Of Claims:

1. (Currently Amended) An inductor, comprising:

at least one high permeability core gap piece FAP positioned within a core of the inductor such that along at least one magnetic flux path of the core of the inductor passes through the at least one high permeability core gap piece;

~~wherein the at least one FAP is a high permeability core gap piece; and~~

wherein the at least one high permeability core gap piece FAP has an effective magnetic permeability that is at least 1000 times greater than a permeability of air and varies so as to result in the at least one high permeability core gap piece is capable of affecting an inductance of the inductor based on, at least in part, on the effective magnetic permeability of the at least one high permeability core gap piece, wherein the effective magnetic permeability changes based, at least in part, on the following factors:

i) at least one magnetic flux ~~through the at least one FAP~~, and

ii) sufficient heating of the at least one high permeability core gap piece FAP.

2. (Currently Amended) The inductor of claim 1, wherein the sufficient heating is to a Curie temperature of the at least one high permeability core gap piece FAP.

3. (Currently Amended) The inductor of claim 2, wherein the inductor further comprises at least one ~~MAP, wherein the at least one MAP is a~~ metallic gap piece, wherein the at least one metallic gap piece MAP is located:

i) within the core of the inductor such that the at least one magnetic flux passes through the at least one metallic gap piece, and

ii) in sufficient proximity to the at least one high permeability core gap piece FAP,

wherein the at least one metallic gap piece is capable of being heated when the at least one magnetic flux passes through the at least one metallic gap piece; and

wherein the at least one metallic gap piece is capable of causing, when being heated, hereby resulting in the sufficient heating by at least one metallic gap piece MAP of the at least one high permeability core gap piece FAP.

4. (Currently Amended) The inductor of claim 3, wherein the inductor further comprises at least one insulator, wherein the at least one insulator is:

i) a low permeability non-metallic core gap piece,

ii) positioned within the core of the inductor such that along the at least one magnetic flux of the core of the inductor passes through the at least one insulator, and

iii) is capable of affecting part hereby further adjusting an inductance of the inductor.

5. (Currently Amended) The inductor of claim 1, wherein the at least one high permeability core gap piece FAP comprises at least one ferrite material.

6. (Original) The inductor of claim 5, wherein the at least one soft ferrite material is selected from a group consisted of Nickel-Zinc ferrite material, Magnesium-Zinc ferrite material, and Manganese-Zinc ferrite material.

7. (Currently Amended) The inductor of claim 1, wherein the at least one high permeability core gap piece FAP comprises at least one material having suitable relative permeability in a range between 14 to 550.

8. (Currently Amended) The inductor of claim 1, wherein the at least one high permeability core gap piece FAP comprises at least one molyperalloy power material.

9. (Original) The inductor of claim 8, wherein the at least one molyperalloy power material contains at least 50 percent weight of Nickel, at least 20 percent weight of Iron, and the balance comprising another suitable material.

10. (Original) The inductor of claim 2, wherein the Curie temperature is between about 130 and about 1200 degrees Celsius.

11. (Original) The inductor of claim 6, wherein the Curie temperature is about 200 degrees Celsius.

12. (Withdrawn) The inductor of claim 1, wherein the at least one FAP comprises at least one first FAP part and at least one second FAP part wherein the at least one first FAP part and the at least one second FAP part are separate structures.

13. (Withdrawn) The inductor of claim 12, wherein the at least one first FAP part differs from the at least one second FAP part in at least one of the followings characteristics: composition, size, and shape.

14. (Withdrawn) The inductor of claim 13, wherein the at least one first FAP part has a first shape and the at least one second FAP part has a second shape, and wherein the first shape is complementary to the second shape such that the at least one first FAP part interlocks with the at least one second FAP part to assemble the at least one FAP.

15-18. Cancelled.