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NOTICE OF ALLOWANCE AND FEE(S) DUE

24504 7590 05/18/2020
THOMAS | HORSTEMEYER, LLP
3200 WINDY HILL ROAD, SE
SUITE 1600E
ATLANTA, GA 30339

EXAMINER	
HARDEE, JOHN R	
ART UNIT	PAPER NUMBER
1761	

DATE MAILED: 05/18/2020

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/989,655	05/25/2018	Kenneth M. Ponder	821920-1033	5897

TITLE OF INVENTION: REFRIGERANT WITH LUBRICATING OIL FOR REPLACEMENT OF R22 REFRIGERANT

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$500	\$0.00	\$0.00	\$500	08/18/2020

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: Maintenance fees are due in utility patents issuing on applications filed on or after Dec. 12, 1980. It is patentee's responsibility to ensure timely payment of maintenance fees when due. More information is available at www.uspto.gov/PatentMaintenanceFees.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (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.

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.

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

24504 7590 05/18/2020
THOMAS | HORSTEMEYER, LLP
3200 WINDY HILL ROAD, SE
SUITE 1600E
ATLANTA, GA 30339

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 transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

(Typed or printed name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/989,655	05/25/2018	Kenneth M. Ponder	821920-1033	5897

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APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$500	\$0.00	\$0.00	\$500	08/18/2020

EXAMINER	ART UNIT	CLASS-SUBCLASS
HARDEE, JOHN R	1761	252-067000

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 03-09 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,

1 _____

(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.

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 must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). 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. Fees submitted: ☐ Issue Fee ☐ Publication Fee (if required) ☐ Advance Order - # of Copies _____

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

☐ Electronic Payment via EFS-Web ☐ Enclosed check ☐ Non-electronic payment by credit card (Attach form PTO-2038)

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. _____

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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15/989,655	05/25/2018	Kenneth M. Ponder	821920-1033	5897
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THOMAS HORSTEMEYER, LLP			HARDEE, JOHN R	
3200 WINDY HILL ROAD, SE			ART UNIT	
SUITE 1600E			PAPER NUMBER	
ATLANTA, GA 30339			1761	

DATE MAILED: 05/18/2020

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

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

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 30 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.

Privacy Act Statement

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.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
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. 15/989,655	Applicant(s) Ponder et al.	
	Examiner JOHN R HARDEE	Art Unit 1761	AIA (FITF) 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 applicant's RCE, IDS and amendments of 4/30/20.
☐ 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 See Continuation Sheet. 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 <u>04302020</u> .	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. _____.	

/JOHN R HARDEE/ Primary Examiner, Art Unit 1761	
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Continuation of 3. The allowed claim(s) is/are: 30,32,34,37-40 and 47-59

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application is being examined under the pre-AIA first to invent provisions.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on April 30, 2020 has been entered.

Allowable Subject Matter

3. Claims 30, 32, 34, 37-40 and 47-59 are allowed.
4. The following is an examiner's statement of reasons for allowance: Among the references submitted in the IDS of April 30, 2020, the closest prior art is Powell et al., US 6,606,868. The reference discloses percentages of the two recited refrigerants which overlap with those presently recited, but a careful reading shows that these are only proportions of the refrigerants and a third refrigerant, a hydrocarbon, is present in all compositions motivated by the reference.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

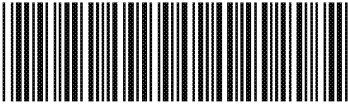
accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner, Dr. John R. Hardee, whose email address is john.hardee@uspto.gov. *Correspondence by email is strongly encouraged*, including for scheduling telephone interviews. Should this be impracticable, the examiner's telephone number is (571) 272-1318. The examiner can normally be reached on Monday through Friday from 8:00 until 4:30. In the event that the examiner is not available, his supervisor, Mr. Harold Pyon, may be reached at (571) 272-1498.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8100. Please note that examiners may not accept or enter faxed amendments.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

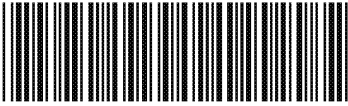
/JOHN R HARDEE/
Primary Examiner
Art Unit 1761

Issue Classification 	Application/Control No. 15/989,655	Applicant(s)/Patent Under Reexamination Ponder et al.
	Examiner JOHN R HARDEE	Art Unit 1761

CPC						
Symbol					Type	Version
C09K	/	5	/	045	F	2013-01-01
C10M	/	171	/	008	I	2013-01-01
C09K	/	2205	/	22	A	2013-01-01
C09K	/	2205	/	43	A	2013-01-01
C10M	/	2203	/	1065	A	2013-01-01
C10M	/	2223	/	041	A	2013-01-01
F25B	/	2400	/	18	A	2013-01-01
C10N	/	2020	/	101	A	2020-05-01

CPC Combination Sets						
Symbol			Type	Set	Ranking	Version
	/		/			

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	19	
/JOHN R HARDEE/ Primary Examiner, Art Unit 1761	12 May 2020	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

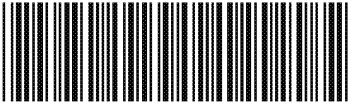
Issue Classification 	Application/Control No. 15/989,655	Applicant(s)/Patent Under Reexamination Ponder et al.
	Examiner JOHN R HARDEE	Art Unit 1761

INTERNATIONAL CLASSIFICATION			
CLAIMED			
C09K	/	5	/ 04
NON-CLAIMED			
	/		/

US ORIGINAL CLASSIFICATION	
CLASS	SUBCLASS

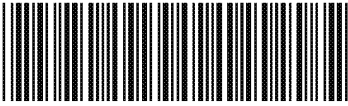
CROSS REFERENCES(S)						
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)					

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	19	
/JOHN R HARDEE/ Primary Examiner, Art Unit 1761	12 May 2020	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

Issue Classification 	Application/Control No. 15/989,655	Applicant(s)/Patent Under Reexamination Ponder et al.
	Examiner JOHN R HARDEE	Art Unit 1761

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☒ T.D. ☐ R.1.47															
CLAIMS															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	30	8	39	10	48	16	57								
-	31	9	40	14	49	18	58								
7	32	-	41	6	50	12	59								
-	33	-	42	13	51										
13	34	-	43	17	52										
-	35	-	44	5	53										
-	36	-	45	11	54										
2	37	-	46	15	55										
3	38	4	47	19	56										

NONE (Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 19	
/JOHN R HARDEE/ Primary Examiner, Art Unit 1761 (Primary Examiner) _____ (Date) _____		O.G. Print Claim(s) 1	O.G. Print Figure 1

<i>Search Notes</i> 	Application/Control No. 15/989,655	Applicant(s)/Patent Under Reexamination Ponder et al.
	Examiner JOHN R HARDEE	Art Unit 1761

CPC - Searched*		
Symbol	Date	Examiner
C09K5/045, 2205/22	04/07/2020	JRH

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
EAST text and CPC searches. PE2E inventor search.	09/18/2019	JRH
C09K5/045, 2205/22	04/07/2020	JRH

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner
C09K	5/045; 2205/22	04/07/2020	JRH

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	15989655
	Filing Date	2018-05-25
	First Named Inventor	Kenneth M. Ponder
	Art Unit	1761
	Examiner Name	Hardee, John R.
	Attorney Docket Number	821920-1033

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	4983312		1992-01-08	Tamura et al.	
	2	6606868	B1	2003-08-19	Powell et al.	
	3	6863840	B2	2005-03-08	Goble	
	4	5688432	A	1997-11-18	Pearson	
	5	6271184	B1	2001-08-07	Seebauer et al.	
	6	5254280	A	1993-10-19	Thomas et al.	
	7	5384057	A	1995-01-24	Wilczek	
	8	4971712		1990-11-20	Gorski et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.R.H/

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	15989655
Filing Date	2018-05-25
First Named Inventor	Kenneth M. Ponder
Art Unit	1761
Examiner Name	Hardee, John R.
Attorney Docket Number	821920-1033

9	5145594	A	1992-09-08	Anton et al.
10	5942149	A	1999-08-24	Webber, III

If you wish to add additional U.S. Patent citation information please click the Add button.

Add

U.S. PATENT APPLICATION PUBLICATIONS

Remove

Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	20030062508	A1	2003-04-03	Singh et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button.

Add

FOREIGN PATENT DOCUMENTS

Remove

Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1							

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	15989655
Filing Date	2018-05-25
First Named Inventor	Kenneth M. Ponder
Art Unit	1761
Examiner Name	Hardee, John R.
Attorney Docket Number	821920-1033

EXAMINER SIGNATURE

Examiner Signature	/JOHN R HARDEE/ (05/12/2020)	Date Considered	05/12/2020
--------------------	------------------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.R.H/

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	15989655
Filing Date	2018-05-25
First Named Inventor	Kenneth M. Ponder
Art Unit	1761
Examiner Name	Hardee, John R.
Attorney Docket Number	821920-1033

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Todd Deveau/	Date (YYYY-MM-DD)	2020-04-30
Name/Print	Todd Deveau	Registration Number	29526

This collection of information is required by 37 CFR 1.97 and 1.98. 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 1 hour 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, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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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 the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
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 inspections 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.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L3	3	(US-20030062508-\$ US-5145594-\$ US-5942149-\$).DID.	US-PGPUB; USPAT	OR	ON	2020/05/12 09:35
L8	8	(US-4971712-\$ US-4983312-\$ US-5254280-\$ US-6271184-\$ US-5384057-\$ US-6606868-\$ US-5688432-\$ US-6863840-\$).DID.	US-PGPUB; USPAT	OR	ON	2020/05/12 09:40
L9	11	3 8	US-PGPUB; USPAT	OR	ON	2020/05/12 09:41
L10	1	(US-6606868-\$).did.	USPAT	OR	ON	2020/05/12 09:47
S2	9	"1" adj "1" adj "2" adj "2" adj tetrafluoroethane	US-PGPUB; USPAT	OR	OFF	2017/12/04 12:11
S4	4678	(r hfc) adj "134" r134 hfc134	US-PGPUB; USPAT	OR	OFF	2017/12/04 12:14
S5	9	"1" adj "1" adj "2" adj "2" adj tetrafluoroethane	US-PGPUB; USPAT	OR	OFF	2017/12/04 12:14
S6	4685	S4 S5	US-PGPUB; USPAT	OR	OFF	2017/12/04 12:14
S7	2057	"1,1,2,2-tetrafluoroethane"	US-PGPUB; USPAT	OR	OFF	2018/02/21 09:22
S8	4733	(r hfc) adj "134" r134 hfc134	US-PGPUB; USPAT	OR	OFF	2018/02/21 09:22

S9	9	"1" adj "1" adj "2" adj "2" adj tetrafluoroethane	US-PGPUB; USPAT	OR	OFF	2018/02/21 09:22
S10	5584	S8 S9 S7	US-PGPUB; USPAT	OR	OFF	2018/02/21 09:22
S11	7912	(r hfc) adj "125" r125 hfc125 pentafluoroethane	US-PGPUB; USPAT	OR	OFF	2018/02/21 09:24
S12	2057	"1,1,2,2-tetrafluoroethane"	US-PGPUB; USPAT	OR	OFF	2018/02/21 09:24
S13	4733	(r hfc) adj "134" r134 hfc134	US-PGPUB; USPAT	OR	OFF	2018/02/21 09:24
S14	9	"1" adj "1" adj "2" adj "2" adj tetrafluoroethane	US-PGPUB; USPAT	OR	OFF	2018/02/21 09:24
S15	5584	S13 S14 S12	US-PGPUB; USPAT	OR	OFF	2018/02/21 09:24
S16	1132	S11 near4 S15	US-PGPUB; USPAT	OR	OFF	2018/02/21 09:24
S17	914	S11 near2 S15	US-PGPUB; USPAT	OR	OFF	2018/02/21 09:25
S18	617	S11 near S15	US-PGPUB; USPAT	OR	OFF	2018/02/21 09:25
S19	276	S18 AND ((C09K5/045 OR C09K2205/22).CPC.)	US-PGPUB; USPAT	OR	OFF	2018/02/21 09:25
S20	2	((("9982179") or ("8197706"))).PN.	US-PGPUB; USPAT	OR	OFF	2019/09/18 16:04

5/12/2020 10:26:16 AM

C:\Users\jhardee\Documents\EAST\Workspaces\989655.wsp

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (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.

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.

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

24504 7590 05/18/2020
THOMAS | HORSTEMEYER, LLP
3200 WINDY HILL ROAD, SE
SUITE 1600E
ATLANTA, GA 30339

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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 transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

(Typed or printed name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/989,655	05/25/2018	Kenneth M. Ponder	821920-1033	5897

TITLE OF INVENTION: REFRIGERANT WITH LUBRICATING OIL FOR REPLACEMENT OF R22 REFRIGERANT

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$500	\$0.00	\$0.00	\$500	08/18/2020

EXAMINER	ART UNIT	CLASS-SUBCLASS
HARDEE, JOHN R	1761	252-067000

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 03-09 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 Thomas|Horstemeyer, LLP

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 must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

R421A LLC

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Alpharetta, GA

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government4a. Fees submitted: ☒ Issue Fee ☐ Publication Fee (if required) ☐ Advance Order - # of Copies _____

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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 /Todd Deveau/

Date May 19, 2020

Typed or printed name Todd Deveau

Registration No. 29,526

Electronic Patent Application Fee Transmittal

Application Number:	15989655			
Filing Date:	25-May-2018			
Title of Invention:	REFRIGERANT WITH LUBRICATING OIL FOR REPLACEMENT OF R22 REFRIGERANT			
First Named Inventor/Applicant Name:	Kenneth M. Ponder			
Filer:	Todd Deveau./Sheila Gray			
Attorney Docket Number:	821920-1033			
Filed as Small Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
UTILITY APPL ISSUE FEE	2501	1	500	500

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				500

Electronic Acknowledgement Receipt

EFS ID:	39476567
Application Number:	15989655
International Application Number:	
Confirmation Number:	5897
Title of Invention:	REFRIGERANT WITH LUBRICATING OIL FOR REPLACEMENT OF R22 REFRIGERANT
First Named Inventor/Applicant Name:	Kenneth M. Ponder
Customer Number:	24504
Filer:	Todd Deveau./Sheila Gray
Filer Authorized By:	Todd Deveau.
Attorney Docket Number:	821920-1033
Receipt Date:	19-MAY-2020
Filing Date:	25-MAY-2018
Time Stamp:	10:59:07
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$ 500
RAM confirmation Number	E20205IA59293106
Deposit Account	200778
Authorized User	Sheila Gray

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	821920-1033__Issue_Fee.pdf	104833	no	1
			1f58673c99797b5a0fcefcd6441f31ce81fb41b8		

Warnings:**Information:**

2	Fee Worksheet (SB06)	fee-info.pdf	30318	no	2
			1fe577344dd1b054c28adea8525544989fb554b0		

Warnings:**Information:**

Total Files Size (in bytes):			135151
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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
15/989,655	05/25/2018	1761	865	821920-1033	7	3

CONFIRMATION NO. 5897
CORRECTED FILING RECEIPT



CC00000117147023

24504
THOMAS | HORSTEMEYER, LLP
3200 WINDY HILL ROAD, SE
SUITE 1600E
ATLANTA, GA 30339

Date Mailed: 05/21/2020

Receipt is acknowledged of this non-provisional utility patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF FIRST INVENTOR, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection.

Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a corrected Filing Receipt, including a properly marked-up ADS showing the changes with strike-through for deletions and underlining for additions. If you received a "Notice to File Missing Parts" or other Notice requiring a response for this application, please submit any request for correction to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections provided that the request is grantable.

Inventor(s)

Kenneth M. Ponder, Cumming, GA;
Steffan Thomas, Buckhead, GA, Deceased;

Applicant(s)

R421A LLC, Alpharetta, GA;

Power of Attorney: The patent practitioners associated with Customer Number 24504

Domestic Priority data as claimed by applicant

This application is a CON of 13/493,491 06/11/2012 PAT 9982179
which is a CON of 12/961,045 12/06/2010 PAT 8197706
which is a CON of 10/937,736 09/08/2004 ABN
which claims benefit of 60/501,049 09/08/2003

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.) - None.

Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access Application via Priority Document Exchange: Yes

Permission to Access Search Results: Yes

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

If Required, Foreign Filing License Granted: 06/14/2018

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 15/989,655**

Projected Publication Date: Not Applicable

Non-Publication Request: No

Early Publication Request: No

**** SMALL ENTITY ****

Title

REFRIGERANT WITH LUBRICATING OIL FOR REPLACEMENT OF R22 REFRIGERANT

Preliminary Class

252

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

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Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific

countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

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The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

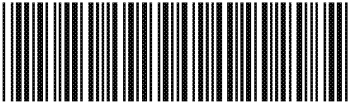
NOT GRANTED

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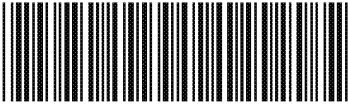
technology, manufacture products, deliver services, and grow your business, visit <http://www.SelectUSA.gov> or call +1-202-482-6800.

Issue Classification 	Application/Control No. 15/989,655	Applicant(s)/Patent Under Reexamination Ponder et al.
	Examiner JOHN R HARDEE	Art Unit 1761

CPC						
Symbol					Type	Version
C09K	/	5	/	045	F	2013-01-01
C10M	/	171	/	008	I	2013-01-01
C09K	/	2205	/	22	A	2013-01-01
C09K	/	2205	/	43	A	2013-01-01
C10M	/	2203	/	1065	A	2013-01-01
C10M	/	2223	/	041	A	2013-01-01
F25B	/	2400	/	18	A	2013-01-01
C10N	/	2020	/	101	A	2020-05-01

CPC Combination Sets							
Symbol				Type	Set	Ranking	Version
	/		/				

NONE	Total Claims Allowed:	
(Assistant Examiner)	(Date)	20
/JOHN R HARDEE/ Primary Examiner, Art Unit 1761	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1

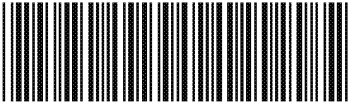
Issue Classification 	Application/Control No. 15/989,655	Applicant(s)/Patent Under Reexamination Ponder et al.	
	Examiner JOHN R HARDEE	Art Unit 1761	

INTERNATIONAL CLASSIFICATION			
CLAIMED			
C09K	/	5	/ 04
NON-CLAIMED			
	/		/

US ORIGINAL CLASSIFICATION	
CLASS	SUBCLASS

CROSS REFERENCES(S)						
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)					

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	20	
/JOHN R HARDEE/ Primary Examiner, Art Unit 1761	(Date)	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)		1	1

Issue Classification 	Application/Control No. 15/989,655	Applicant(s)/Patent Under Reexamination Ponder et al.
	Examiner JOHN R HARDEE	Art Unit 1761

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☒ T.D. ☐ R.1.47															
CLAIMS															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	30	8	39	10	48	17	57								
-	31	9	40	15	49	19	58								
7	32	-	41	6	50	12	59								
-	33	-	42	13	51										
14	34	-	43	18	52										
-	35	-	44	5	53										
-	36	-	45	11	54										
2	37	-	46	16	55										
3	38	4	47	20	56										

NONE (Assistant Examiner) _____ (Date) _____	Total Claims Allowed: 20	
	/JOHN R HARDEE/ Primary Examiner, Art Unit 1761 (Primary Examiner) _____ (Date) _____	O.G. Print Claim(s) 1



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/989,655	05/25/2018	Kenneth M. Ponder	821920-1033	5897

24504 7590 05/26/2020
THOMAS | HORSTEMEYER, LLP
3200 WINDY HILL ROAD, SE
SUITE 1600E
ATLANTA, GA 30339

EXAMINER

HARDEE, JOHN R

ART UNIT	PAPER NUMBER
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1761

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

05/26/2020

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ozzie.liggins@tkhr.com
docketing@thomashorstemeyer.com
uspatents@tkhr.com



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

Application No. : 15989655
Applicant : Ponder
Filing Date : 05/25/2018
Date Mailed : 05/26/2020

NOTICE TO FILE CORRECTED APPLICATION PAPERS

Notice of Allowance Mailed

This application has been accorded an Allowance Date and is being prepared for issuance. The application, however, is incomplete for the reasons below.

Applicant is given two (2) months from the mail date of this Notice within which to respond. This time period for reply is extendable under 37 CFR 1.136(a) for only TWO additional MONTHS.

The informalities requiring correction are indicated in the attachment(s). If the informality pertains to the abstract, specification (including claims) or drawings, the informality must be corrected with an amendment in compliance with 37 CFR 1.121 (or, if the application is a reissue application, 37 CFR 1.173). Such an amendment may be filed after payment of the issue fee if limited to correction of informalities noted herein. See Waiver of 37 CFR 1.312 for Documents Required by the Office of Patent Publication, 1280 Off. Gaz. Patent Office 918 (March 23, 2004). In addition, if the informality is not corrected until after payment of the issue fee, for purposes of 35 U.S.C. 154(b)(1)(iv), "all outstanding requirements" will be considered to have been satisfied when the informality has been corrected. A failure to respond within the above-identified time period will result in the application being ABANDONED.

See attachment(s).

*A copy of this notice MUST be returned with the reply. Please address response to
"Mail Stop Issue Fee, Commissioner for Patents,
P.O. Box 1450, Alexandria, VA 22313-1450".*

/Chris Harmon/
Publication Branch
Office of Data Management
(571) 272-4200

IDENTIFICATION OF DRAWING DEFICIENCIES

- ☐ There is a hole or the image thereof within the illustration. FIG(s)
- ☐ The illustration is penetrated or traversed by a solid or broken line that is not intended to be part of the drawing, such as a dark line caused by a flaw in the copying process. FIG(s)
- ☐ An ink stamp or the image thereof obscures part of the illustration. FIG(s)
- ☐ The drawing is marred by black smudges, obliterations, or fax/copier marks (for example, speckles or dots in a substantial portion of the drawing). FIG(s)
- ☐ Figure numbers are duplicated or missing. FIG(s)
- ☐ Drawing sheet or figure is missing. FIG(s)
- ☐ Numbers, letters, or reference characters in the drawing have been crossed out or are illegibly handwritten. FIG(s)
- ☒ The character of the lines, numbers, and letters is poor. FIG(s) 1,2
- ☐ The drawing's background shows that the original drawing was made on graph paper or other paper with a pattern or decoration. FIG(s)
- ☐ The FIG. number label is placed in a location that causes the drawing to be read upside down. FIG(s)
- ☐ Data, a reference number, or part of the drawing is truncated or missing, or a lead line has no reference number. FIG(s)
- ☐ The drawing and/or the FIG. label contain(s) foreign language. FIG(s)
- ☐ This utility application contains a photograph of a view that is capable of being illustrated as a line drawing. FIG(s)
- ☐ A petition under 37 CFR 1.84(a)(2) to accept color drawings has been granted, but the brief description of the drawings in the specification does not contain (or has not been amended to contain) the paragraph required by 37 CFR 1.84(a)(2)(iii).
- ☐ This reissue application contains added and/or amended drawings that are not labeled as "New" or "Amended" or "Canceled" as required by 37 CFR 1.173(b)(3). FIG(s)
- ☐ This Design reissue application contains a drawing that is labeled as "Canceled" but is not surrounded by brackets, or a drawing that is surrounded by brackets but is not labeled as "Canceled." See 37 CFR 1.173(b)(3). FIG(s)
- ☐ OTHER:
- ☐ COMMENTS:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Confirmation No.: 5897

Kenneth M. Ponder

Group Art Unit: 1761

Serial No.: 15/989,655

Examiner: Hardee, John R.

Filed: May 25, 2018

Docket No. 821920-1033

For: **REFRIGERANT WITH LUBRICATING OIL FOR REPLACEMENT OF R22
REFRIGERANT**

RESPONSE TO NOTICE TO FILE CORRECTED APPLICATION PAPERS
MAILED May 26, 2020 (Notice of Allowance Mailed)

MAIL STOP: ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Notice to File Corrected Application Papers mailed May 26, 2020, (Notice of Allowance mailed May 18, 2020, Issue Fee paid May 19, 2020), Applicants submit herewith Replacement Sheets for the figures as filed with the application and request that the Replacement Sheets be accepted for at least the following reasons.

In the Notice to File Corrected Application Papers, the Office asserts the following sole drawing deficiency: "The characters of the lines, numbers and letters in FIG(s) 1, 2 is poor." Applicants submit the present Replacement Sheets overcome the noted deficiencies. Applicants further note the same figures were accepted and printed in parent Application Serial No. 12/961,045, now U.S. Patent No. 8,197,706.

For at least the above reasons, Applicants believe the remarks above and Replacement Sheets for FIG(s) 1, 2 submitted herewith to be fully responsive to the Notice to File Corrected Application Papers mailed May 26, 2020, (Notice of Allowance mailed May 18, 2020, Issue Fee paid May 19, 2020), within the time period set forth in such. The Commissioner is authorized to charge Deposit Account 20-0778 for any deficiencies or credit any over payments.

Respectfully submitted,

THOMAS | HORSTEMEYER, LLP

By: /Todd Deveau/

Todd Deveau

Registration No. 29,526

THOMAS | HORSTEMEYER, L.L.P.
Customer Number 24504

FIG. 1

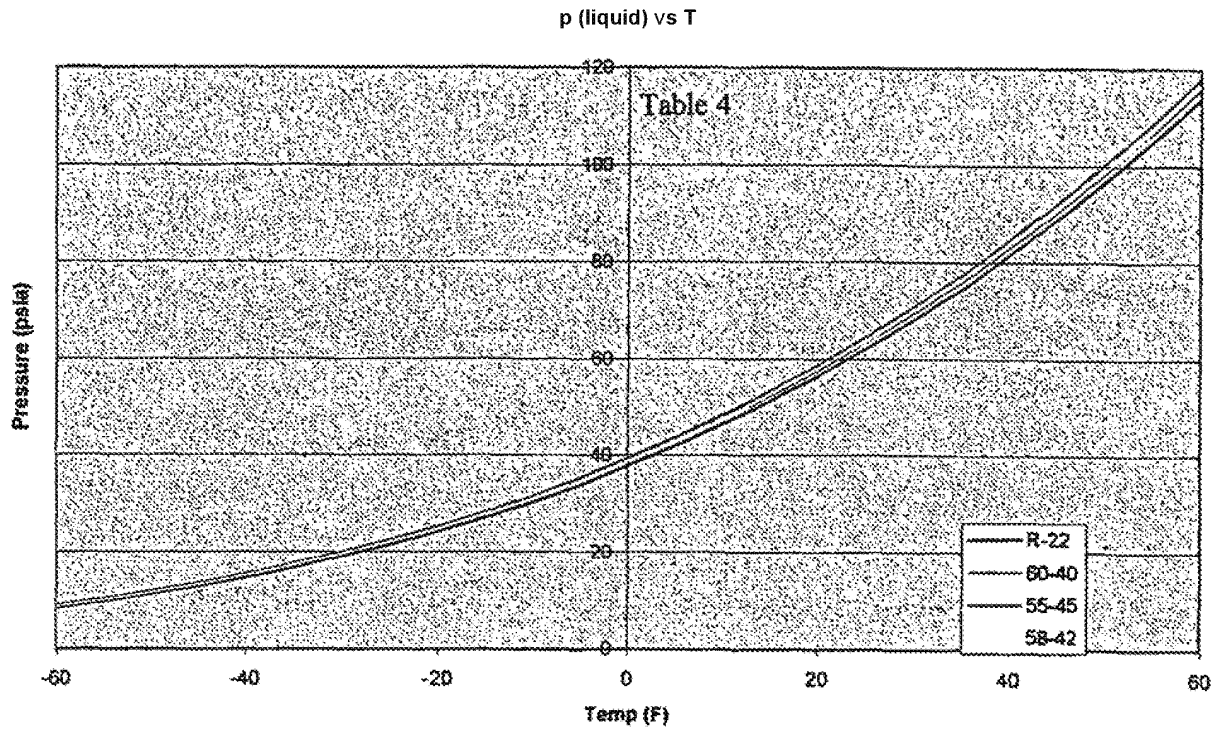
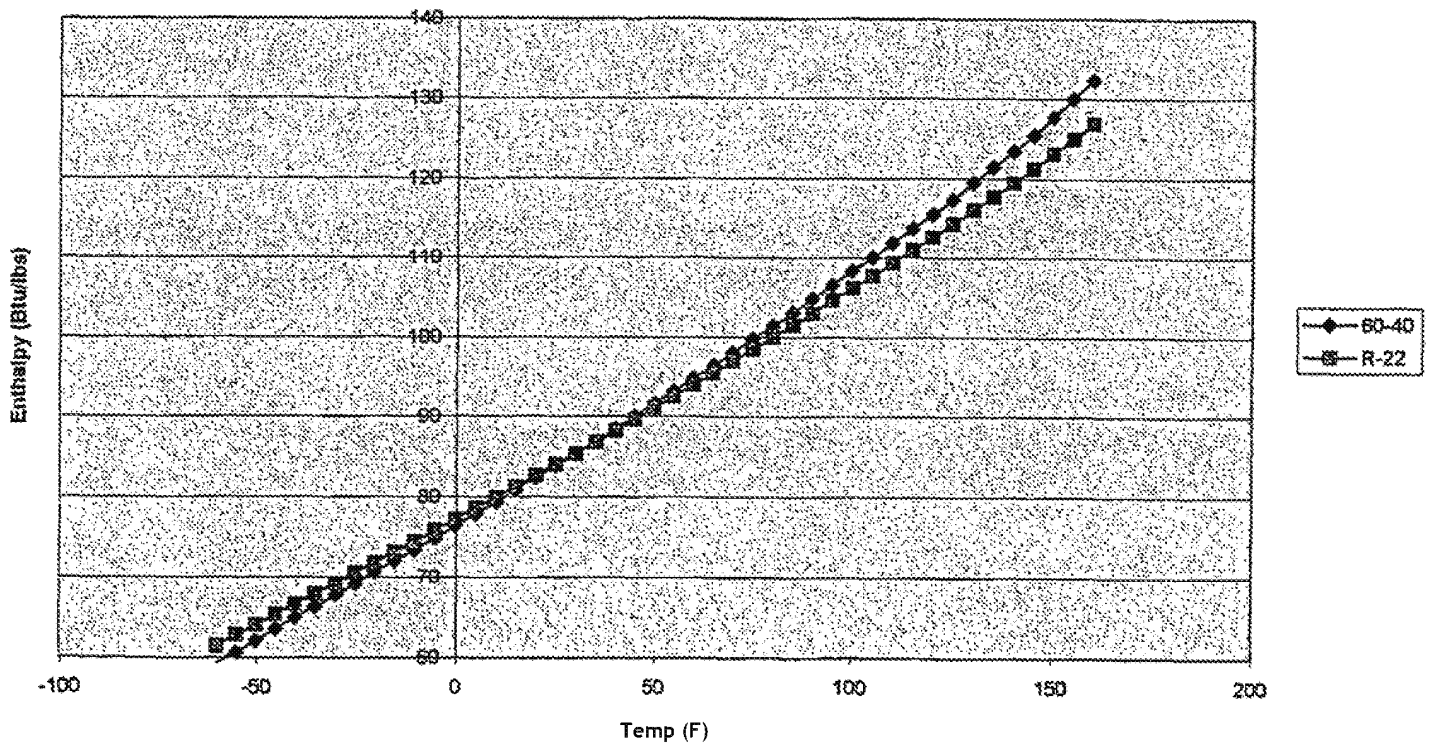


FIG. 2
Temp vs Enthalpy



Electronic Acknowledgement Receipt

EFS ID:	39563247
Application Number:	15989655
International Application Number:	
Confirmation Number:	5897
Title of Invention:	REFRIGERANT WITH LUBRICATING OIL FOR REPLACEMENT OF R22 REFRIGERANT
First Named Inventor/Applicant Name:	Kenneth M. Ponder
Customer Number:	24504
Filer:	Todd Deveau./Sheila Gray
Filer Authorized By:	Todd Deveau.
Attorney Docket Number:	821920-1033
Receipt Date:	28-MAY-2020
Filing Date:	25-MAY-2018
Time Stamp:	14:43:54
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Amendment/Argument after Notice of Appeal	821920-1033__Response_to_Notice_to_File_Corrected_Application_Papers__Drawings_.pdf	139918 0bf91ff160e948088b0fc28cd593fb8f16f1216b	no	2

Warnings:

Information:					
2	Drawings-only black and white line drawings	Replacement_1033.pdf	757069	no	1
			df347d4d21b27cb0794929472964d3a0559ea5e1		
Warnings:					
Information:					
Total Files Size (in bytes):				896987	
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					