



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

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/403,349	12/01/2020	10852002	5998-00374	6614

26753 7590 11/11/2020
ANDRUS INTELLECTUAL PROPERTY LAW, LLP
790 NORTH WATER STREET
SUITE 2200
MILWAUKEE, WI 53202

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

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

The Patent Term Adjustment is 33 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

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 Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

Kyle Thomas Kestner, Schaumburg, IL;
PRINCE CASTLE LLC, Carol Stream, IL;
Christopher B. Lyons JR., Lagrange, IL;
Charles B. Hartfelder, Hanover Park, IL;
Zachary N. McCoy, South Elgin, IL;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

Document Description: Issue Fee Payment (PTO-85B)

Issue Fee Transmittal Form

Application Number	Filing Date	First Named Inventor	Atty. Docket No.	Confirmation No.
16403349	03-May-2019	Kyle Kestner	5998-00374	6614

TITLE OF INVENTION :

MULTI-ZONE FOOD HOLDING BIN

Entity Status	Application Type	Art Unit	Class - Subclass	EXAMINER
Regular Undiscounted	Utility under 35 USC 111(a)	3761	398000	JOSEPH PELHAM
Issue Fee Due	Publication Due	Total Fee(s) Due	Date Due	Prev. Paid Fee
\$1000	\$0	\$1000	28-Oct-2020	\$0

1.Change of Correspondence Address and/or Indication Of Fee Address (37 CFR 1.33 & 1.363)

Current Correspondence Address:	Current Indicated Fee Address :
26753 ANDRUS INTELLECTUAL PROPERTY LAW, LLP 790 NORTH WATER STREET SUITE 2200 MILWAUKEE WI 53202 UNITED STATES 4142717590 ~~patentdocketing@andruslaw.com~~	
☐ Change of correspondence address requested, system generated AIA/122-EFS form attached	☐ Fee Address indication requested, system generated SB/47-EFS form attached

2.Entity Status**Change in Entity Status**

- Applicant certifying micro entity status; system generated Micro Entity certification form attached. See 37 CFR 1.29.
Note: Absent a valid certification of micro entity status, issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment. If this box is checked, you will be prompted to choose a micro entity status on the gross income basis (37 CFR 1.29(a)) or the institution of higher education basis (37 CFR 1.29(d)), and make the applicable certification online.
- ☐ Applicant asserting small entity status. See 37 CFR 1.27.
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.
- ☒ Applicant changing to regular undiscounted fee status.
Note: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

Document Description: Issue Fee Payment (PTO-85B)

3.The Following Fee(s) Are Submitted:☒ Issue Fee☐ I authorize USPTO to apply my previously paid issue fee to the current fees due☐ Publication Fee☐ The Director is hereby authorized to apply my previously paid issue fee to the current fee due and to charge deficient fees to Deposit Account Number _____☐ Advance Order - # of copies _____

If **in addition to** the payment of the issue fee amount submitted with this form, there are any discrepancies in any amount(s) due, the Director is authorized to charge any deficiency, or credit any overpayment, to Deposit Account Number 012000.

☒ The **issue fee must be submitted** with this form. **If payment of the issue fee does not accompany this form, checking this box and providing a deposit account number will NOT be effective to satisfy full payment of the fee(s) due.**

4.Firm and/or Attorney Names To Be Printed**NOTE: If no name is listed, no name will be printed**

For printing on the patent front page, list to be displayed as entered

1. ANDRUS INTELLECTUAL PROPERTY LAW, LLP

2.

3.

5.Assignee Name(s) and Residence Data To Be Printed

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.

Name	City	State	Country	Category
PRINCE CASTLE LLC	Carol Stream	ILLINOIS	united states	corporation

6.Signature

I certify, in accordance with 37 CFR 1.4(d)(4) that I am an attorney or agent registered to practice before the Patent and Trademark Office who has filed and has been granted power of attorney in this application. I also certify that this Fee(s) Transmittal form is being transmitted to the USPTO via EFS-WEB on the date indicated below.

Signature	/Benjamin R. Imhoff/	Date	10-28-2020
Name	Benjamin Ross Imhoff	Registration Number	60036

Electronic Patent Application Fee Transmittal				
Application Number:		16403349		
Filing Date:		03-May-2019		
Title of Invention:		MULTI-ZONE FOOD HOLDING BIN		
First Named Inventor/Applicant Name:		Kyle Thomas Kestner		
Filer:		Benjamin Ross Imhoff/Jill Jansen		
Attorney Docket Number:		5998-00374		
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
UTILITY APPL ISSUE FEE	1501	1	1000	1000
PUBL. FEE- EARLY, VOLUNTARY, OR NORMAL	1504	1	0	0
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				1000

Electronic Acknowledgement Receipt	
EFS ID:	40972895
Application Number:	16403349
International Application Number:	
Confirmation Number:	6614
Title of Invention:	MULTI-ZONE FOOD HOLDING BIN
First Named Inventor/Applicant Name:	Kyle Thomas Kestner
Customer Number:	26753
Filer:	Benjamin Ross Imhoff/Jill Jansen
Filer Authorized By:	Benjamin Ross Imhoff
Attorney Docket Number:	5998-00374
Receipt Date:	28-OCT-2020
Filing Date:	03-MAY-2019
Time Stamp:	15:38:55
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$1000
RAM confirmation Number	E20200RF38532134
Deposit Account	012000
Authorized User	Jill Jansen
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.20 (Post Issuance fees) 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)	Web85b.pdf	46192	no	2
			336a48fc33bbcab5faaa5801549c9912753b8e4c		
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	32021	no	2
			f950950394cd9310f985bc00721e7e6016750742		
Warnings:					
Information:					
Total Files Size (in bytes):			78213		
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.					



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

26753 7590 07/28/2020
ANDRUS INTELLECTUAL PROPERTY LAW, LLP
100 EAST WISCONSIN AVENUE, SUITE 1100
MILWAUKEE, WI 53202

EXAMINER

PELHAM, JOSEPH MOORE

ART UNIT

PAPER NUMBER

3761

DATE MAILED: 07/28/2020

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/403,349	05/03/2019	Kyle Thomas Kestner	5998-00374	6614

TITLE OF INVENTION: MULTI-ZONE FOOD HOLDING BIN

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$1000	\$0.00	\$0.00	\$1000	10/28/2020

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.

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

26753 7590 07/28/2020

ANDRUS INTELLECTUAL PROPERTY LAW, LLP
 100 EAST WISCONSIN AVENUE, SUITE 1100
 MILWAUKEE, WI 53202

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 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.
16/403,349	05/03/2019	Kyle Thomas Kestner	5998-00374	6614

TITLE OF INVENTION: MULTI-ZONE FOOD HOLDING BIN

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$1000	\$0.00	\$0.00	\$1000	10/28/2020

EXAMINER	ART UNIT	CLASS-SUBCLASS
PELHAM, JOSEPH MOORE	3761	219-398000

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. _____



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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/403,349	05/03/2019	Kyle Thomas Kestner	5998-00374	6614
26753 7590 07/28/2020 ANDRUS INTELLECTUAL PROPERTY LAW, LLP 100 EAST WISCONSIN AVENUE, SUITE 1100 MILWAUKEE, WI 53202			EXAMINER PELHAM, JOSEPH MOORE	
			ART UNIT 3761	PAPER NUMBER
DATE MAILED: 07/28/2020				

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. 16/403,349	Applicant(s) Kestner et al.	
	Examiner Joseph M Pelham	Art Unit 3761	AIA (FITF) Status Yes

-- 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 amdmnt filed 7/13/20.
☐ 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 _____.	6. ☐ Examiner's Statement of Reasons for Allowance
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material _____.	7. ☒ Other <u>PTO-2323</u> .
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.	

/Joseph M. Pelham/ Primary Examiner, Art Unit 3761	
---	--

Continuation of 3. The allowed claim(s) is/are: 4-6,8-9,13,15-17 and 21-40

AFCP 2.0 Decision

Application No.

16/403,349

Applicant(s)

Kestner et al.

Examiner

Joseph M Pelham

Art Unit

3761

AIA (FITF) Status

Yes

This is in response to the After Final Consideration Pilot request filed 13 July 2020.

1. **Improper Request** – The AFCP 2.0 request is improper for the following reason(s) and the after final amendment submitted with the request will be treated under pre-pilot procedure.

- ☐ An AFCP 2.0 request form PTO/SB/434 (or equivalent document) was not submitted.
- ☐ A non-broadening amendment to at least one independent claim was not submitted.
- ☐ The request is not the first proper AFCP 2.0 request submitted in response to the most recent final rejection.
- ☐ Other: _____

2. **Proper Request**

- A. After final amendment submitted with the request will not be treated under AFCP 2.0.

The after final amendment cannot be reviewed and a search conducted within the guidelines of the pilot program.

- ☐ The after final amendment will be treated under pre-pilot procedure.

- B. Updated search and/or completed additional consideration.

The examiner performed an updated search and/or completed additional consideration of the after final amendment within the time authorized for the pilot program. The result(s) of the updated search and/or completed additional consideration are:

- ☒ 1. All of the rejections in the most recent final Office action are overcome and a Notice of Allowance is issued herewith.
- ☐ 2. The after final amendment would not overcome all of the rejections in the most recent final Office action. See attached interview summary for further details.
- ☐ 3. The after final amendment was reviewed, and it raises a new issue(s). See attached interview summary for further details.
- ☐ 4. The after final amendment raises new issues, but would overcome all of the rejections in the most recent final Office action. A decision on determining allowability could not be made within the guidelines of the pilot. See attached interview summary for further details, including any newly discovered prior art.
- ☐ 5. Other: _____

Examiner Note: Please attach an interview summary when necessary as described above.

<i>Search Notes</i> 	Application/Control No. 16/403,349	Applicant(s)/Patent Under Reexamination Kestner et al.
	Examiner Joseph M Pelham	Art Unit 3761

CPC - Searched*		
Symbol	Date	Examiner
See attached search history	06/23/2019	JP
See attached search update history	07/18/2020	JP

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.

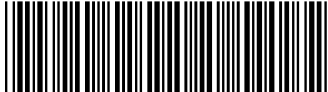
Search Notes		
Search Notes	Date	Examiner
See attached search history	06/22/2019	JP
Inventor name search	06/22/2019	JP
See attached search update history	07/18/2020	JP
InnovationQ concept search at IP.com using parent: Pat. No. 10,512,363	07/18/2020	JP

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner
See attached interference search history		07/18/2020	JP

--	--

<i>Search Notes</i> 	Application/Control No. 16/403,349	Applicant(s)/Patent Under Reexamination Kestner et al.
	Examiner Joseph M Pelham	Art Unit 3761

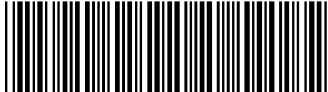
--	--

Issue Classification 	Application/Control No. 16/403,349	Applicant(s)/Patent Under Reexamination Kestner et al.
	Examiner Joseph M Pelham	Art Unit 3761

CPC						
Symbol					Type	Version
F24C	/	7	/	043	F	2013-01-01
A47J	/	39	/	006	I	2013-01-01
A47J	/	36	/	2483	I	2013-01-01
A47J	/	36	/	2488	I	2013-01-01
F24C	/	15	/	34	I	2013-01-01
H05B	/	3	/	0076	I	2013-01-01
F24C	/	15	/	18	A	2013-01-01

CPC Combination Sets						
Symbol			Type	Set	Ranking	Version
	/		/			

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	29	
/Joseph M. Pelham/ Primary Examiner, Art Unit 3761 (Primary Examiner)	18 July 2020 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1,2

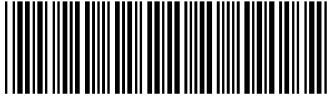
Issue Classification 	Application/Control No. 16/403,349	Applicant(s)/Patent Under Reexamination Kestner et al.
	Examiner Joseph M Pelham	Art Unit 3761

INTERNATIONAL CLASSIFICATION			
CLAIMED			
A47J		36	24
A47J		39	02
NON-CLAIMED			

US ORIGINAL CLASSIFICATION	
CLASS	SUBCLASS
219	214

CROSS REFERENCES(S)						
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)					
219	385	386	394	398	428	

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	29	
/Joseph M. Pelham/ Primary Examiner, Art Unit 3761 (Primary Examiner)	18 July 2020 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1,2

Issue Classification 	Application/Control No. 16/403,349	Applicant(s)/Patent Under Reexamination Kestner et al.
	Examiner Joseph M Pelham	Art Unit 3761

☒ 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		10		19	15	28	26	37						
	2		11		20	16	29	27	38						
	3		12	14	21	17	30	28	39						
1	4	6	13	10	22	18	31	29	40						
2	5		14	11	23	19	32								
3	6	7	15	12	24	20	33								
	7	8	16	13	25	23	34								
4	8	9	17	21	26	24	35								
5	9		18	22	27	25	36								

NONE	Total Claims Allowed:	
(Assistant Examiner)	(Date)	29
/Joseph M. Pelham/ Primary Examiner, Art Unit 3761	18 July 2020	
(Primary Examiner)	(Date)	
		O.G. Print Claim(s)
		O.G. Print Figure
		1
		1,2

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	95	(A47J36/\$ A47J39/\$ F24C15/\$).cpc. and ((bay stage staging display service bin holding holder dispensing dispenser) near3 (food meal)) and (bottom floor surface plate panel) and ((heater heating zones) near5 (individual individually independent independently)) and ((tray bay stage staging display service bin holding holder dispensing dispenser) near3 (tray pan vessel dish chafer chafing)) and ((lid cover) near5 (tray pan vessel dish chafer chafing))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2020/07/18 16:45
L2	1	"10512363".pn. and bezel	US-PGPUB; USPAT	OR	ON	2020/07/18 17:00
L3	42	1 and (lid cover) and ((heater heating) near3 ((top upper) and (bottom lower)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2020/07/18 17:12
L4	95	1 and (lid cover)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2020/07/18 17:15
L5	2	1 and ((heater heating) near3 ((top upper) and (bottom lower))) and (power near7 ((top upper) and (bottom lower)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2020/07/18 17:18
L6	2	1 and ((heater heating) near3 ((top upper) and (bottom lower))) and (power near7 ((high higher top upper) and (bottom lower low)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2020/07/18 17:49
L7	4	("20090266244" "20090199725" "20080302778" "20010007322").pn. and (heater heating)	US-PGPUB; USPAT	OR	ON	2020/07/18 18:24

L8	4	("20090266244" "20090199725" "20080302778" "20010007322").pn. and (individual\$2 independent\$2)	US-PGPUB; USPAT	OR	ON	2020/07/18 18:29
L9	1	("7105779").pn.	US-PGPUB; USPAT	OR	ON	2020/07/18 18:49
L10	1	("7105779").pn. and power	US-PGPUB; USPAT	OR	ON	2020/07/18 18:50

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L11	2	((((bay stage staging display service bin holding holder dispensing dispenser) near3 (food meal)) and (bottom floor surface plate panel) and ((heater heating zones) near5 (individual individually independent independently)) and ((tray bay stage staging display service bin holding holder dispensing dispenser) near3 (tray pan vessel dish chafer chafing)) and ((lid cover) near5 (tray pan vessel dish chafer chafing))).clm.	US-PGPUB	OR	ON	2020/07/18 19:11

7/18/2020 7:12:29 PM

C:\Users\jpelham\Documents\EAST\Workspaces\16.403349.wsp

CERTIFICATION AND REQUEST FOR CONSIDERATION UNDER THE AFTER FINAL CONSIDERATION PILOT PROGRAM 2.0		
Practitioner Docket No.: 5998-00374	Application No.: 16/403,349	Filing Date: 2019-05-03
First Named Inventor: Kyle Thomas Kestner	Title: MULTI-ZONE FOOD HOLDING BIN	
APPLICANT HEREBY CERTIFIES THE FOLLOWING AND REQUESTS CONSIDERATION UNDER THE AFTER FINAL CONSIDERATION PILOT PROGRAM 2.0 (AFCP 2.0) OF THE ACCOMPANYING RESPONSE UNDER 37 CFR 1.116. 1. The above-identified application is (i) an original utility, plant, or design nonprovisional application filed under 35 U.S.C. 111(a) [a continuing application (<i>e.g.</i>, a continuation or divisional application) is filed under 35 U.S.C. 111(a) and is eligible under (i)], or (ii) an international application that has entered the national stage in compliance with 35 U.S.C. 371(c). 2. The above-identified application contains an outstanding final rejection. 3. Submitted herewith is a response under 37 CFR 1.116 to the outstanding final rejection. The response includes an amendment to at least one independent claim, and the amendment does not broaden the scope of the independent claim in any aspect. 4. This certification and request for consideration under AFCP 2.0 is the only AFCP 2.0 certification and request filed in response to the outstanding final rejection. 5. Applicant is willing and available to participate in any interview requested by the examiner concerning the present response. 6. This certification and request is being filed electronically using the Office's electronic filing system (EFS-Web). 7. Any fees that would be necessary consistent with current practice concerning responses after final rejection under 37 CFR 1.116, <i>e.g.</i>, extension of time fees, are being concurrently filed herewith. [There is no additional fee required to request consideration under AFCP 2.0.] 8. By filing this certification and request, applicant acknowledges the following: • Reissue applications and reexamination proceedings are not eligible to participate in AFCP 2.0. • The examiner will verify that the AFCP 2.0 submission is compliant, <i>i.e.</i>, that the requirements of the program have been met (see items 1 to 7 above). For compliant submissions: ○ The examiner will review the response under 37 CFR 1.116 to determine if additional search and/or consideration (i) is necessitated by the amendment and (ii) could be completed within the time allotted under AFCP 2.0. If additional search and/or consideration is required but cannot be completed within the allotted time, the examiner will process the submission consistent with current practice concerning responses after final rejection under 37 CFR 1.116, <i>e.g.</i>, by mailing an advisory action. ○ If the examiner determines that the amendment does not necessitate additional search and/or consideration, or if the examiner determines that additional search and/or consideration is required and could be completed within the allotted time, then the examiner will consider whether the amendment places the application in condition for allowance (after completing the additional search and/or consideration, if required). If the examiner determines that the amendment does not place the application in condition for allowance, then the examiner will contact the applicant and request an interview. ▪ The interview will be conducted by the examiner, and if the examiner does not have negotiation authority, a primary examiner and/or supervisory patent examiner will also participate. ▪ If the applicant declines the interview, or if the interview cannot be scheduled within ten (10) calendar days from the date that the examiner first contacts the applicant, then the examiner will proceed consistent with current practice concerning responses after final rejection under 37 CFR 1.116.		
Signature /Benjamin R. Imhoff/	Date 2020-07-13	
Name (Print/Typed) Benjamin R. Imhoff	Practitioner Registration No. 60,036	
Note: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.		
☒ * Total of <u>1</u> forms are submitted.		

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.

Electronic Patent Application Fee Transmittal				
Application Number:		16403349		
Filing Date:		03-May-2019		
Title of Invention:		MULTI-ZONE FOOD HOLDING BIN		
First Named Inventor/Applicant Name:		Kyle Thomas Kestner		
Filer:		Benjamin Ross Imhoff/Jill Jansen		
Attorney Docket Number:		5998-00374		
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
CLAIMS IN EXCESS OF 20	1202	2	100	200
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				200

Electronic Acknowledgement Receipt	
EFS ID:	39985679
Application Number:	16403349
International Application Number:	
Confirmation Number:	6614
Title of Invention:	MULTI-ZONE FOOD HOLDING BIN
First Named Inventor/Applicant Name:	Kyle Thomas Kestner
Customer Number:	26753
Filer:	Benjamin Ross Imhoff/Jill Jansen
Filer Authorized By:	Benjamin Ross Imhoff
Attorney Docket Number:	5998-00374
Receipt Date:	13-JUL-2020
Filing Date:	03-MAY-2019
Time Stamp:	17:54:58
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$200
RAM confirmation Number	E20207CH55242489
Deposit Account	012000
Authorized User	Jill Jansen
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)
 37 CFR 1.20 (Post Issuance fees)
 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	Response After Final Action	2020-07-13_5998-00374_Amen dment.pdf	57699 b1be329770de81ec7c1aa6bf4dfb497fb6f3 b18d	no	13

Warnings:

Information:

2	After Final Consideration Program Request	2020-07-13_5998-00374_AFCP. pdf	226378 b29aa338edc5ec4b5c5d1e85ddb5d2b2a5f f186d	no	2
---	---	------------------------------------	--	----	---

Warnings:

Information:

3	Fee Worksheet (SB06)	fee-info.pdf	30493 de174102ce32c44e543f91e601e5ef58a07 e99e	no	2
---	----------------------	--------------	--	----	---

Warnings:

Information:

Total Files Size (in bytes):	314570
-------------------------------------	--------

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.

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.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No. :	16/403,349	)	<u>CERTIFICATE OF ELECTRONIC</u>
Applicant :	Kyle Thomas Kestner et al.	)	<u>SUBMISSION</u>
		)	
Filed :	May 3, 2019	)	I hereby certify that this correspondence is
		)	being submitted electronically with the United
Title :	MULTI-ZONE FOOD HOLDING BIN	)	States Patent and Trademark Office's electronic
		)	filing system (EFS Web) on this 13 th day of
		)	July 2020.
TC/A.U. :	3761	)	
Examiner :	Joseph Moore Pelham	)	
		)	<u>/Jill Jansen/</u> <u>07/13/2020</u>
Docket No. :	5998-00374	)	Jill Jansen Date
Conf. No. :	6614	)	

AMENDMENT

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

In response to the Office Action dated April 13, 2020, please amend the above-identified application as follows.

Amendments to the Claims are reflected in the listing of claims, which begins on page 2 of this paper.

Remarks begin on page 12 of this paper.

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

Listing of Claims:

1-3. (Canceled)

4. (Currently Amended) A multi-zone food holding bin comprising:

a chassis having a top panel, a first side panel, a second side panel, a bottom panel, a front face, and an opposing rear face;

a first food holding compartment within the chassis, the first food holding compartment being defined by the first side panel, the second side panel, and a shelf, the first food holding compartment having a first opening, the first opening of the first food holding compartment being configured to allow food items to be placed into and removed from the first food holding compartment;

a substantially planar surface forming a top surface of the shelf and thus a bottom surface of the first food holding compartment, the substantially planar surface extending completely to the first opening of the first food holding compartment, and the substantially planar surface comprising a thermally conductive material;

a first food holding zone formed in the first food holding compartment, the first food holding zone having an independently controllable first heating element disposed at a top portion of the first food holding compartment, and an independently controllable second heating element disposed at a bottom portion of the first food holding compartment, the first food holding zone including a first food holding bay and a second food holding bay, each of the first and second food holding bays being configured to receive a food holding tray; and

a second food holding zone formed in the first food holding compartment, the second food holding zone having an independently controllable third heating element disposed at the top portion of the first food holding compartment and an independently controllable fourth heating element disposed at the bottom portion of the first food holding compartment, the second food holding zone

including a third food holding bay and a fourth food holding bay, each of the third and fourth food holding bays being configured to receive a food holding tray,

wherein the first food holding zone and the second food holding zone are adjacent one another across the substantially planar surface and the first food holding zone is configured to maintain a first temperature and the second food holding zone is configured to maintain a second temperature, the first temperature and the second temperature capable of being different than one another, and

wherein ~~the~~ a first bezel is set forward from the shelf by a space.

5. (Original) The food holding bin of claim 4, wherein the space is configured to allow a latch to rotate from a locked position to an unlocked position to release lids held on lid holding ledges elevated above the substantially planar surface.

6. (Currently Amended) The food holding bin of claim ~~34~~, wherein the first bezel comprises dedicated displays and the dedicated display displays a temperature setting for a corresponding food holding bay.

7. (Canceled)

8. (Currently Amended) The food holding bin of claim ~~24~~, wherein the first and second food holding compartments each have a second opening, uncovered and located at the rear face of the chassis, and the substantially planar bottom surface is configured to allow food items to be placed on the substantially planar surface through the first opening and removed from the planar and bottom surface from the second opening.

9. (Original) The food holding bin of claim 8, wherein the first bezel is located proximate the front face of the chassis, the food holding bin further comprising a second bezel located proximate the opposing rear face of the chassis.

10-12. (Canceled)

13. (Currently Amended) The food holding bin of claim ~~14~~, wherein both the first and second independently controllable heating elements comprise a resistive wire.

14. (Canceled)

15. (Currently Amended) The food holding bin of claim ~~14~~, wherein the substantially planar surface is substantially free of any dividing walls or other structure between the first, second, third, and fourth food holding bays.

16. (Currently Amended) The food holding bin of claim ~~14~~, wherein the first independently controllable heating element comprises a radiant heating source and the second independently controllable heating element provides heat energy through conduction.

17. (Currently Amended) ~~A multi-zone food holding bin comprising:~~
~~a chassis having a top panel, a first side panel, a second side panel, a bottom panel, a front face, and an opposing rear face;~~
~~a first food holding compartment within the chassis, the first food holding compartment being defined by the first side panel, the second side panel, and a shelf, the first food holding compartment having a first opening, the first opening of the first food holding compartment being configured to allow food items to be placed into and removed from the first food holding compartment;~~
~~a substantially planar surface forming a top surface of the shelf and thus a bottom surface of the first food holding compartment, the substantially planar surface extending completely to the first opening of the first food holding compartment, and the substantially planar surface comprising a thermally conductive material;~~
~~a first food holding zone formed in the first food holding compartment, the first food holding zone having an independently controllable first heating element disposed at a top portion of the first~~

Appln. No. 16/403,349
Amdt. Dated July 13, 2020
Reply to Office Action of April 13, 2020

~~food holding compartment, and an independently controllable second heating element disposed at a bottom portion of the first food holding compartment, the first food holding zone including a first food holding bay and a second food holding bay, each of the first and second food holding bays being configured to receive a food holding tray; and~~

~~a second food holding zone formed in the first food holding compartment, the second food holding zone having an independently controllable third heating element disposed at the top portion of the first food holding compartment and an independently controllable fourth heating element disposed at the bottom portion of the first food holding compartment, the second food holding zone including a third food holding bay and a fourth food holding bay, each of the third and fourth food holding bays being configured to receive a food holding tray,~~

~~wherein the first food holding zone and the second food holding zone are adjacent one another across the substantially planar surface and the first food holding zone is configured to maintain a first temperature and the second food holding zone is configured to maintain a second temperature, the first temperature and the second temperature capable of being different than one another, and~~

The food holding bin of claim 4, wherein each food holding bay further comprises a dedicated lid holding shelf elevated above the substantially planar bottom surface in the first food holding compartment, the dedicated lid holding shelf being configured to receive and store a lid for a food holding tray.

18-20. (Canceled)

21. (Previously Presented) A multi-zone food holding bin comprising:

a chassis having a top panel, a first side panel, a second side panel, a bottom panel, a front face, and an opposing rear face;

a first food holding compartment within the chassis, the first food holding compartment being defined by the first side panel, the second side panel, and a shelf, the first food holding compartment having a first opening, the first opening of the first food holding compartment being

configured to allow food items to be placed into and removed from the first food holding compartment;

a substantially planar surface forming a top surface of the shelf and thus a bottom surface of the first food holding compartment, the substantially planar surface extending completely to the first opening of the first food holding compartment, and the substantially planar surface comprising a thermally conductive material;

a first food holding zone formed in the first food holding compartment, the first food holding zone having an independently controllable first heating element disposed at a top portion of the first food holding compartment, and an independently controllable second heating element disposed at a bottom portion of the first food holding compartment, the first food holding zone including a first food holding bay and a second food holding bay, each of the first and second food holding bays being configured to receive a food holding tray; and

a second food holding zone formed in the first food holding compartment, the second food holding zone having an independently controllable third heating element disposed at the top portion of the first food holding compartment and an independently controllable fourth heating element disposed at the bottom portion of the first food holding compartment, the second food holding zone including a third food holding bay and a fourth food holding bay, each of the third and fourth food holding bays being configured to receive a food holding tray,

wherein the first food holding zone and the second food holding zone are adjacent one another across the substantially planar surface and the first food holding zone is configured to maintain a first temperature and the second food holding zone is configured to maintain a second temperature, the first temperature and the second temperature capable of being different than one another, and

wherein the first independently controllable heating element is adapted to output more heat energy than the second heating element.

22. (Original) The food holding bin of claim 1, wherein the first independently controllable heating element is a radiant heating element.

23. (Original) The food holding bin of claim 1, wherein the substantially planar surface comprises aluminum.

24. (Original) The food holding bin of claim 1, further comprising a food holding tray resting on the substantially planar surface.

25. (Original) The food holding bin of claim 1, the first food holding zone and the second food holding zone being heated to different temperatures.

26. (Previously Presented) A multi-zone food holding bin
a chassis having a top panel, a first side panel, a second side panel, a bottom panel, a front face, and an opposing rear face;
a first food holding compartment within the chassis, the first food holding compartment being defined by the first side panel, the second side panel, and a shelf, the first food holding compartment having a first opening, the first opening of the first food holding compartment being configured to allow food items to be placed into and removed from the first food holding compartment;

a substantially planar surface forming a top surface of the shelf and thus a bottom surface of the first food holding compartment, the substantially planar surface extending completely to the first opening of the first food holding compartment, and the substantially planar surface comprising a thermally conductive material;

a first food holding zone formed in the first food holding compartment, the first food holding zone having an independently controllable first heating element disposed at a top portion of the first food holding compartment, and an independently controllable second heating element disposed at a bottom portion of the first food holding compartment, the first food holding zone including a first food holding bay and a second food holding bay, each of the first and second food holding bays being configured to receive a food holding tray; and

a second food holding zone formed in the first food holding compartment, the second food holding zone having an independently controllable third heating element disposed at the top portion

of the first food holding compartment and an independently controllable fourth heating element disposed at the bottom portion of the first food holding compartment, the second food holding zone including a third food holding bay and a fourth food holding bay, each of the third and fourth food holding bays being configured to receive a food holding tray,

wherein the first food holding zone and the second food holding zone are adjacent one another across the substantially planar surface and the first food holding zone is configured to maintain a first temperature and the second food holding zone is configured to maintain a second temperature, the first temperature and the second temperature capable of being different than one another,

further comprising a second food holding compartment disposed below the first food holding compartment within the chassis, the second food holding compartment being defined by the first side panel, the second side panel, and the shelf, the second food holding compartment having a first opening, the first opening of the second food holding compartment being configured to allow food items to be placed into and removed from the food holding compartment; and

a controller operatively coupled to the second heating element and to the fourth heating element, the controller being configured to independently operate the second heating element and the fourth heating element

wherein the shelf is located between the first and second food holding compartments, the shelf comprises a first side and a second side, the first side facing into the first food holding compartment, the second side facing into the second food holding compartment, and the second and fourth heating elements are disposed in the shelf and in thermal communication with the first side, the second and fourth heating elements being capable of providing different amounts of heat energy into the first and second food holding zones of the first food holding compartment, and

wherein the shelf comprises an upper thermally conductive plate, a lower thermally conductive plate, a fifth heating element, and a sixth heating element, the fifth and sixth heating elements being disposed between the upper thermally conductive plate and the lower thermally conductive plate, the second and fourth heating elements being in thermal communication with the upper thermally conductive plate and the fifth and sixth heating elements being in thermal

communication with the lower thermally conductive plate, the fifth and sixth heating elements providing heat energy into the second food holding compartment.

27. (Original) The food holding bin of claim 26, wherein an insulative material is provided between the second and the fifth heating elements.

28. (New) The food holding bin of claim 21, wherein the first and second food holding compartments each have a second opening, uncovered and located at the rear face of the chassis, and the substantially planar bottom surface is configured to allow food items to be placed on the substantially planar surface through the first opening and removed from the planar and bottom surface from the second opening.

29. (New) The food holding bin of claim 21, comprising a rotatable latch disposed adjacent the first opening.

30. (New) The food holding bin of claim 21, wherein both the first and second independently controllable heating elements comprise a resistive wire.

31. (New) The food holding bin of claim 21, wherein the substantially planar surface is substantially free of any dividing walls or other structure between the first, second, third, and fourth food holding bays.

32. (New) The food holding bin of claim 21, wherein the first independently controllable heating element comprises a radiant heating source and the second independently controllable heating element provides heat energy through conduction.

33. (New) The food holding bin of claim 21, wherein each food holding bay further comprises a dedicated lid holding shelf elevated above the substantially planar bottom surface in the

first food holding compartment, the dedicated lid holding shelf being configured to receive and store a lid for a food holding tray; and

wherein a rotatable latch disposed adjacent the first opening is rotatable between a locked position in which the latch prevents a lid from being removed from the lid holding shelf, and an unlocked position in which the latch allows removal of a lid from the lid holding shelf, the latch being biased to the locked position by gravity.

34. (New) The food holding bin of claim 26, wherein the first and second food holding compartments each have a second opening, uncovered and located at the rear face of the chassis, and the substantially planar bottom surface is configured to allow food items to be placed on the substantially planar surface through the first opening and removed from the planar and bottom surface from the second opening.

35. (New) The food holding bin of claim 26, comprising a rotatable latch disposed adjacent the first opening.

36. (New) The food holding bin of claim 26, wherein both the first and second independently controllable heating elements comprise a resistive wire.

37. (New) The food holding bin of claim 26, wherein the substantially planar surface is substantially free of any dividing walls or other structure between the first, second, third, and fourth food holding bays.

38. (New) The food holding bin of claim 26, wherein the first independently controllable heating element comprises a radiant heating source and the second independently controllable heating element provides heat energy through conduction.

39. (New) The food holding bin of claim 26, wherein each food holding bay further comprises a dedicated lid holding shelf elevated above the substantially planar bottom surface in the

Appln. No. 16/403,349
Amdt. Dated July 13, 2020
Reply to Office Action of April 13, 2020

first food holding compartment, the dedicated lid holding shelf being configured to receive and store a lid for a food holding tray; and

wherein a rotatable latch disposed adjacent the first opening is rotatable between a locked position in which the latch prevents a lid from being removed from the lid holding shelf, and an unlocked position in which the latch allows removal of a lid from the lid holding shelf, the latch being biased to the locked position by gravity.

40. (New) The food holding bin of claim 26, further comprising:

a first bezel is set forward from the shelf by a space;

a rotatable latch disposed adjacent the first opening;

wherein each food holding bay further comprises a dedicated lid holding shelf elevated above the substantially planar bottom surface in the first food holding compartment, the dedicated lid holding shelf being configured to receive and store a lid for a food holding tray; and

wherein the first independently controllable heating element is adapted to output more heat energy than the second heating element.

Appln. No. 16/403,349
Amdt. Dated July 13, 2020
Reply to Office Action of April 13, 2020

REMARKS

The Office Action mailed on April 13, 2020 has been reviewed and carefully considered by the Applicant.

Claim Status

Claims 4, 5, and 21-27 have been allowed. Claims 4, 6, 8, 13, and 15-17 are currently amended. Claims 1-3, 7, 10-12, 14, and 18-20 are canceled. New claims 28-40 are added. The application is currently presented with claims 4-6, 8, 9, 13, 15-17, and 21-40.

Allowable Subject Matter

Claims 4, 5, and 21-27 have been allowed. The Applicant thanks the Examiner for this indication. Without acquiescing to the specific substantive rejections of the Office Action and while reserving the right to seek the currently presented, or other, claim scope in a continuation application, the present amendment seeks to build upon these allowed claims in order to place the application in a condition for allowance.

Independent claims 1 and 10 are canceled. Claim 17 is currently amended to depend from allowed independent claim 4. Claims 2, 3, 7, 11, 12, 14, and 18-20 are also canceled. The cancelations and amendment render the substantive rejections of those claims moot.

Furthermore, dependent claims 6, 8, 9, 13, 15, and 16 are currently amended to depend from allowed claim 4. Thus each of those claims are now allowable at least by way of their dependence from allowed claim 4.

Similarly, new claims are presented that are dependent from independent claims 21 and 26. These claims correspond to previously presented dependent claims, but now depend respectively from allowed claims 21 or 26. No new matter is introduced with these new claims.

Newly presented claims 28 and 34 correspond to previously presented claim 8.

Newly presented claims 29 and 35 correspond to previously presented claim 10.

Newly presented claims 30 and 36 correspond to previously presented claim 13.

Newly presented claims 31 and 37 correspond to previously presented claim 15.

Newly presented claims 32 and 38 correspond to previously presented claim 16.

Newly presented claims 33 and 39 correspond to previously presented claim 18.

Appln. No. 16/403,349
Amdt. Dated July 13, 2020
Reply to Office Action of April 13, 2020

Newly presented claim 40 corresponds to features of previously presented claims 4, 10, 17, and 21.

Cancellation or amendment of each of the previously rejected claims renders moot each of the rejections set forth in the Office Action. All of the claims are thus allowable.

Conclusion

By the present amendments and arguments, the application is believed to be in a condition for allowance with claims 4-6, 8, 9, 13, 15-17, and 21-40. Such action is earnestly requested.

Respectfully submitted,

ANDRUS INTELLECTUAL PROPERTY LAW, LLP

By /Benjamin R. Imhoff/

Benjamin R. Imhoff
Reg. No. 60,036

100 East Wisconsin Avenue, Suite 1100
Milwaukee, Wisconsin 53202
Telephone No. (414) 271-7590



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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/403,349	05/03/2019	Kyle Thomas Kestner	5998-00374	6614
26753	7590	04/13/2020	EXAMINER	
ANDRUS INTELLECTUAL PROPERTY LAW, LLP 100 EAST WISCONSIN AVENUE, SUITE 1100 MILWAUKEE, WI 53202			PELHAM, JOSEPH MOORE	
			ART UNIT	PAPER NUMBER
			3761	
			NOTIFICATION DATE	DELIVERY MODE
			04/13/2020	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):

patentdocketing@andruslaw.com

Notice of Pre-AIA or AIA Status

The reply filed 9/27/19 is acknowledged. Claims 1-27 remain pending

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

Claim(s) 1-3, 6-9, 12, 14-16, 22, 23, and 25 are rejected under 35 U.S.C. 102(a)(1) as anticipated by US PGPub. 2011/0114618.

The examiner notes initially that each compartment 23 of heated cabinet 10 (Fig. 1, paragraph 14) is heated by heating elements 50 in shelves 21 (Fig. 10, pars. 49-51), each heating element 50 conductively heats a food item placed on the thermally conductive shelf surface 21 immediately above it (par. 21) and radiantly heats a food item placed on the shelf surface immediately beneath it (**Fig 10**, pars. 49 & 50), the heaters 50 in each compartment are independently controlled (par. 49), and the heaters in each shelf zone A, B, C are independently controlled. Independently controlled heating elements 50 are therefore immediately above and below each zone A, B, C on any given shelf 21, possibly excluding, at most, the zones in the top compartment 23.

Referring to Figures 1, 2, and 10 especially, '618 discloses “a multi-zone food holding bin” as claimed, including “a first food holding compartment” (topmost in Figs. 1 & 2) comprising “first” and “second side” panels 18, 20 and “a shelf” 21 (see par. 16), a

“thermally conductive” “planar... top surface of the shelf” (par. 20), “a first food holding zone” 21A (Fig. 2 & par. 22) in the “first food holding compartment” with an “independently controllable first... and second heating element[s] disposed [respectively at] top... and... bottom portion[s] of the first food holding compartment,” as recited in claim 1. Also as recited in claim 1, each “food holding zone” A, B, or C of each shelf 21 is capable of receiving two appropriately sized food trays; hence the “first food holding zone” has “a first food holding bay and a second food holding bay, each... configured to receive a food holding tray,” and an adjacent “second food holding zone [21 B] in the first food holding compartment [23] has third... and fourth food holding bays.” Note that the radiant heaters 50 shown mounted to shelves 21 in Fig. 10, when implemented in the multi-compartment food holding bin of Figs. 1 and 2, in independently controlled zones, heat radiantly from above and conductively from below, ***as recited in claims 12, 16, and 22.***

Thus are first and second heating elements respectively above and below the first food holding zone, third and fourth heating elements respectively above and below the second food holding zone.

As recited in claim 2, ‘610 discloses “a second food holding compartment disposed below the first,” with the second and fourth heating elements in the shelf between them, respectively heating from below the first and second food holding zones.

As in claims 3 and 6-9, ‘618 discloses opposing front and rear “bezels” 26 that “define” front and rear openings to the food holding compartments 23, the bezels (or “escutcheons”) serving as dedicated displays of temperature and additional food item information (pars. 17, 18 & 48).

As in claims 14 and 15, the shelf planar surface is continuous and undivided (par. 20).

As in claim 23, the shelf planar surface is aluminum (par. 21).

And as in claim 25, the first and second food holding zones can be “heated to different temperatures” (par. 22).

Claim Rejections - 35 USC § 103

Claims 10, 11, and 17-20 are rejected under 35 U.S.C. 103 as being unpatentable over ‘618 in view of US Pat. 7105779

The claims differ substantively from ‘618 only in calling for a *tray lid* inserted in a shelf in a top portion of the food holding compartment, and a *latch rotatable* with respect to the shelf between a locked and unlocked position.

‘779 discloses, at Figs. 1-5, 4;21-27, and 5:8-25, a lid 55 resting on a sheet metal shelf 35 (claim 19), and a latch 85 rotatable between a locked and unlocked position (claim 10), between trays and thus holding bays (claim 11), and the latch handles depending from their pivot points, at least suggesting that the vertical, closed default position makes use of gravity (claim 18).

It would have been obvious to adapt the trays, lids, and latches of ‘779 to the bays of ‘618 to preserve moisture in food items in which minimal moisture loss is preferred, such as meat portions for fast food sandwiches. The latches of ‘779 serving to secure tray lids in the compartment while withdrawing the trays. While ‘779 does not discuss a lid support made of wire (claim 20), this feature does not patentably distinguish the claim from the prior art. It

would have been obvious to utilize a wire shelf since it is a conventional alternative oven rack support means, which lessens *conductive* heat loss to the chamber walls.

Claims 13 and 24 are rejected under 35 U.S.C. 103 as being unpatentable over ‘618.

While ‘618 is silent about specific heating element structure, it would have been obvious to utilize a resistive wire, as recited in claim 13, since this is a well known conventional heating element material, commended by its cost and versatility, being suitable for both radiant and conductive heating (convective as well). And it would have been obvious to rest a food holding tray, as in claim 24, on the shelf surface of ‘618, since food placed on a staging or holding bin is routinely kept in a tray.

Allowable Subject Matter

Claims 4, 5 and 21-27 are allowed.

Response to Arguments

Applicant's arguments filed 9/29/19 have been fully considered but they are not persuasive.

Applicant argument rests on the single contention that “[t]here is no teaching, express or implied [in prior art PG Pub. 2011/0114618 to *Chung et al*], that upper and lower heating elements within a single zone are independently controllable” (Response, p. 15, Applicant’s emphasis). Referring to Figures 1 & 10, and ¶¶ [0049]-[0050], Chung et al disclose, however, that “***each*** of the compartments 23 ***maintains a separate temperature***, ...by way of electric heating elements formed in, attached above or

mounted below the compartment shelves 21” (Exr’s emphasis). Moreover, noting that the escutcheon for each shelf, of the stacked plurality of shelves, has dedicated status indicators and display panels (both designated ‘32’) for each shelf zone (see Figs. 2 & 9, ¶¶ [0030]-[0031]), if all vertically aligned zones, i.e., on all shelves, are controlled only as a group, and not separately, then the temperature and “on-status” indicators for five of the six shelves are redundant. Hence Chung et al disclose independent control of each zone on each shelf.

Conclusion

Applicant’s amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, ***THIS ACTION IS MADE FINAL***. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph M. Pelham whose telephone number is (571)272-4786. The examiner can normally be reached M-F 8am-4pm.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Ibrahim Abraham can be reached at (571) 270-5569. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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). If you would like assistance from a

Application/Control Number: 16/403,349
Art Unit: 3761

Page 7

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOSEPH M PELHAM/
Primary Examiner, Art Unit 3761
4/8/20

<i>Notice of References Cited</i>	Application/Control No. 16/403,349		Applicant(s)/Patent Under Reexamination Kestner et al.	
	Examiner Joseph M Pelham		Art Unit 3761	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20120261426-A1	10-2012	Tomczyk; Wieslaw	A47J39/02	220/592.01
*	B	US-20110252984-A1	10-2011	Chung; Terry Tae-II	G01K7/01	99/483
*	C	US-9980322-B1	05-2018	Kestner; Kyle Thomas	A47J36/2483	1/1
	D					
	E					
	F					
	G					
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

<i>Index of Claims</i> 	Application/Control No. 16/403,349	Applicant(s)/Patent Under Reexamination Kestner et al.
	Examiner Joseph M Pelham	Art Unit 3761

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS									
☐ Claims renumbered in the same order as presented by applicant					☐ CPA		☐ T.D.		☐ R.1.47
CLAIM		DATE							
Final	Original	06/23/2019	04/08/2020						
	1	✓	✓						
	2	✓	✓						
	3	✓	✓						
	4	✓	=						
	5	✓	=						
	6	✓	✓						
	7	✓	✓						
	8	✓	✓						
	9	✓	✓						
	10	✓	✓						
	11	✓	✓						
	12	✓	✓						
	13	✓	✓						
	14	✓	✓						
	15	✓	✓						
	16	✓	✓						
	17	✓	✓						
	18	✓	✓						
	19	✓	✓						
	20	✓	✓						
	21	✓	=						
	22	✓	=						
	23	✓	=						
	24	✓	=						
	25	✓	=						
	26	✓	=						
	27	✓	=						

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	16/403,349-Conf. #6614
				Filing Date	May 3, 2019
				First Named Inventor	Kyle Thomas Kestner
				Art Unit	3761
				Examiner Name	J. M. Pelham
				Attorney Docket Number	29178/50736CON1
Sheet	1	of	2		

[illegible][illegible]

Examiner Signature	/JOSEPH M PELHAM/	Date Considered	04/08/2020
-----------------------	-------------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to office. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	16/403,349-Conf. #6614
				Filing Date	May 3, 2019
				First Named Inventor	Kyle Thomas Kestner
				Art Unit	3761
				Examiner Name	J. M. Pelham
Sheet	2	of	2	Attorney Docket Number	29178/50736CON1

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	A	Prince Castle LLC, Holding Bin DHB3PT-33DD, June 2015.	
	B	Prince Castle LLC, Original Instructions Operation Manual for Holding Ben DHB3PT-33DD, DHB3SS-33DD, available prior to April 19, 2016	

Examiner Signature	/JOSEPH M PELHAM/	Date Considered	04/08/2020
-----------------------	-------------------	--------------------	------------

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

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.



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

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
16/403,349	05/03/2019	Kyle Thomas Kestner	29178/50736CON1

CONFIRMATION NO. 6614

POA ACCEPTANCE LETTER



26753

ANDRUS INTELLECTUAL PROPERTY LAW, LLP
100 EAST WISCONSIN AVENUE, SUITE 1100
MILWAUKEE, WI 53202

Date Mailed: 12/04/2019

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 12/02/2019.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at (571) 272-4000 or (571) 272-4200 or 1-888-786-0101.

/ytdemisse/



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

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
16/403,349	05/03/2019	Kyle Thomas Kestner	29178/50736CON1

CONFIRMATION NO. 6614

POWER OF ATTORNEY NOTICE



4743
MARSHALL, GERSTEIN & BORUN LLP
233 SOUTH WACKER DRIVE
6300 WILLIS TOWER
CHICAGO, IL 60606-6357

Date Mailed: 12/04/2019

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 12/02/2019.

- The Power of Attorney to you in this application has been revoked by the applicant. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at (571) 272-4000 or (571) 272-4200 or 1-888-786-0101.

/ytdemisse/

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.

POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(c).

I hereby appoint:



Practitioners associated with Customer Number:

26753

OR



Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number

Name	Registration Number

As attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignments documents attached to this form in accordance with 37 CFR 3.73(c).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(c) to:



The address associated with Customer Number:

26753

OR

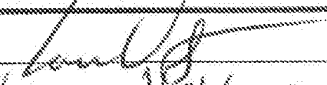
☐	Firm or Individual Name			
☐	Address			
☐	City	State	Zip	
☐	Country			
☐	Telephone	Email		

Assignee Name and Address: Prince Castle LLC
355 East Kehoe Blvd
Carol Stream, IL 60188

A copy of this form, together with a statement under 37 CFR 3.73(c) (Form PTO/AIA/86 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(c) may be completed by one of The practitioners appointed in this form, and must identify the application in which this Power of Attorney is to be filed.

SIGNATURE of Assignee of Record

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature		Date	6/5/14
Name	Loren Veltrop	Telephone	630-462-4598
Title	VP Innovation		

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. 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 1.11 and 1.14. This collection is estimated to take 3 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, 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.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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.

Electronic Acknowledgement Receipt	
EFS ID:	37898773
Application Number:	16403349
International Application Number:	
Confirmation Number:	6614
Title of Invention:	MULTI-ZONE FOOD HOLDING BIN
First Named Inventor/Applicant Name:	Kyle Thomas Kestner
Customer Number:	4743
Filer:	Benjamin Ross Imhoff/Amanda White
Filer Authorized By:	Benjamin Ross Imhoff
Attorney Docket Number:	29178/50736CON1
Receipt Date:	02-DEC-2019
Filing Date:	03-MAY-2019
Time Stamp:	14:47:32
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
------------------------	----

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	Prince_Castle_POA.pdf	778356	no	2
			d97859cf899bd0d219d656d29f7a6bd77511c26c		

Warnings:

Information:	
Total Files Size (in bytes):	778356
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.	

FEE TRANSMITTAL		Complete if known		
		Application Number	16/403,349-Conf. #6614	
		Filing Date	May 3, 2019	
		First Named Inventor	Kyle Thomas Kestner	
☐ Applicant asserts small entity status. See 37 CFR 1.27.	Examiner Name	J. M. Pelham		
☐ Applicant certifies micro entity status. See 37 CFR 1.29. Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.	Art Unit	3761		
TOTAL AMOUNT OF PAYMENT	(\$)	1,455.00	Practitioner Docket No.	29178/50736CON1

METHOD OF PAYMENT (check all that apply)

☐ Check
 ☒ Credit Card
 ☐ Money Order
 ☐ None
 ☐ Other (please identify): _____

☒ Deposit Account
 Deposit Account Number: 13-2855
 Deposit Account Name: MARSHALL, GERSTEIN & BORUN

For the above-identified deposit account, the Director is hereby authorized to (check all that apply):

☐ Charge fee(s) indicated below
 ☐ Charge fee(s) indicated below, **except for the filing fee**
☒ Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17
 ☒ Credit any overpayment of fee(s)

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES (U = undiscounted fee; S = small entity fee; M = micro entity fee)

Application Type	FILING FEES			SEARCH FEES			EXAMINATION FEES			Fees Paid (\$)
	U (\$)	S (\$)	M (\$)	U (\$)	S (\$)	M (\$)	U (\$)	S (\$)	M (\$)	
Utility	300	150*	75	660	330	165	760	380	190	
Design	200	100	50	160	80	40	600	300	150	
Plant	200	100	50	420	210	105	620	310	155	
Reissue	300	150	75	660	330	165	2,200	1,100	550	
Provisional	280	140	70	0	0	0	0	0	0	

* The \$150 small entity status filing fee for a utility application is further reduced to \$75 for a small entity status applicant who files the application via EFS-Web.

2. EXCESS CLAIM FEES

Fee Description	Undiscounted Fee (\$)	Small Entity Fee (\$)	Micro Entity Fee (\$)
Each claim over 20 (including Reissues)	100	50	25
Each independent claim over 3 (including Reissues)	460	230	115
Multiple dependent claims	820	410	205

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
27	- 27 or HP =	x	=
HP = highest number of total claims paid for, if greater than 20.			
Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
1	- 3 or HP =	x	=
HP = highest number of independent claims paid for, if greater than 3.			

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$400 (\$200 for small entity) (\$100 for micro entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
	- 100 =	/50 =	(round up to a whole number) x	=

4. OTHER FEE(S)

	Fees Paid (\$)
Non-English specification, \$130 fee (no small or micro entity discount)	
Non-electronic filing fee under 37 CFR 1.16(t) for a utility application, \$400 fee (\$200 small or micro entity)	
1821 Each reexamination independent claim in excess of ...	1,380.00
9202 Service charge for below minimum balance	25.00
Other (e.g., late filing surcharge): 9101 Processing each payment refused or charged back	50.00

SUBMITTED BY			
Signature	/Michael A. Chinlund/	Registration No. (Attorney/Agent)	55,064
Telephone	(312) 474-6300		
Name (Print/Type)	Michael A. Chinlund		Date
			November 1, 2019

Electronic Patent Application Fee Transmittal				
Application Number:		16403349		
Filing Date:		03-May-2019		
Title of Invention:		MULTI-ZONE FOOD HOLDING BIN		
First Named Inventor/Applicant Name:		Kyle Thomas Kestner		
Filer:		Michael Alexander Chinlund/Diane Arpino		
Attorney Docket Number:		29178/50736CON1		
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
INDEPENDENT CLAIMS IN EXCESS OF 3	1201	3	460	1380
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				1380

Electronic Acknowledgement Receipt	
EFS ID:	37630170
Application Number:	16403349
International Application Number:	
Confirmation Number:	6614
Title of Invention:	MULTI-ZONE FOOD HOLDING BIN
First Named Inventor/Applicant Name:	Kyle Thomas Kestner
Customer Number:	4743
Filer:	Michael Alexander Chinlund/Diane Arpino
Filer Authorized By:	Michael Alexander Chinlund
Attorney Docket Number:	29178/50736CON1
Receipt Date:	01-NOV-2019
Filing Date:	03-MAY-2019
Time Stamp:	11:53:31
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$1380
RAM confirmation Number	E2019A1B53595430
Deposit Account	132855
Authorized User	Diane Arpino
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Fee Worksheet (SB06)	Fee_Transmittal.PDF	31554	no	1
			a3a9fde4ede46b3dbccf50ad7388834b4d4e23		
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30715	no	2
			bbee0a1e2ffde5c1c059556d743e50c229f055ac		
Warnings:					
Information:					
Total Files Size (in bytes):			62269		
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.					



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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/403,349	05/03/2019	Kyle Thomas Kestner	29178/50736CON1	6614
4743	7590	10/10/2019	EXAMINER	
MARSHALL, GERSTEIN & BORUN LLP			PELHAM, JOSEPH MOORE	
233 SOUTH WACKER DRIVE				
6300 WILLIS TOWER				
CHICAGO, IL 60606-6357				
			ART UNIT	PAPER NUMBER
			3761	
			NOTIFICATION DATE	DELIVERY MODE
			10/10/2019	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):

mgbdoCKET@marshallip.com

NOTICE REQUIRING EXCESS CLAIMS FEES	Application No. 16/403,349	Applicant(s) Kestner et al.
	Art Unit OTOR	AIA (FITF) Status Yes
	The excess claim(s) filed on <u>27 September 2019</u> is/are not accompanied by the appropriate payment of excess claims fees set forth in 37 CFR 1.16(h)-(j) or 1.492(d)-(f). Excess claims fees are required for each claim in independent form in excess of three (§ 1.16(h)), each claim (whether dependent or independent) in excess of twenty (note that § 1.75(c) indicates how multiple dependent claims are considered for fee calculation purposes) (§ 1.16(i)), and each application that contains a multiple dependent claim (§ 1.16(j)). Since the application is not under a final rejection, applicant is given a time period of TWO (2) MONTHS from the mailing date of this notice to submit either: (1) the fee payment of \$ <u>1,380.00</u> , or (2) an amendment in compliance with 37 CFR 1.121 that cancels the excess claim(s), in order to avoid ABANDONMENT. Extensions of this time period may be granted under 37 CFR 1.136, unless the excess claim(s) was/were presented in a preliminary amendment. ☒ 1. The funds in Deposit Account No. <u>132855</u> are insufficient to cover the entire fee due. The balance is due within the time period set forth in this notice. See note below regarding the appropriate service charge. ☐ 2. The Credit Card payment to cover the entire fee due to Account _____ (Card type + last 4 digits ONLY) was refused. The balance is due within the time period set forth in this notice. See note below regarding the appropriate service charge. ☐ 3. The amendment that includes the excess claim(s) has not been entered, since applicant has failed to remit (or authorize charge to a Deposit Account or Credit Card) the fee as indicated on the attached Patent Application Fee Determination Record (PTO/SB/06). Remittance or authorization is due within the time period set forth in this notice. ☐ 4. The fee submitted in this application is insufficient. A balance of \$ _____ is due for presentation of excess claims (37 CFR 1.16(h)-(j) or 1.492(d)-(f)). ☐ 5. Other. Explanation (<i>Provide specific details of the required correction in order to assist the applicant. Indicate whether a service charge has been added to the fee due</i>): _____ THE AMOUNT OF THE FEE(S) DUE IS SUBJECT TO CHANGE, GENERALLY ON OCTOBER 1 OF EACH YEAR (37 CFR 1.16, 1.21 & 1.492). THE AMOUNT OF THE FEE(S) DUE IS DETERMINED AS OF THE DATE A COMPLETE REPLY WITH THE APPROPRIATE FEE(S) IS RECEIVED BY THE OFFICE (37 CFR 1.8 & 1.10). BECAUSE THE AMOUNT DUE IS SUBJECT TO CHANGE, IT IS RECOMMENDED THAT APPLICANT CHECK THE CURRENT FEE SCHEDULE WHICH IS AVAILABLE ON THE USPTOS WEBSITE AT: http://www.uspto.gov/web/offices/ac/qs/ope/fees.htm Service Charges: There is a \$50 service charge for processing each payment refused (including a check returned unpaid) or charged back by a financial institution (37 CFR 1.21(m)). There is a \$25.00 service charge for each month when the balance of a deposit account is below \$1000 at the end of the month (37 CFR 1.21(b)(2)). Technical Support Staff (TSS): <u>/TERRY BRYANT/</u> Phone Number: <u>(571)272-1028</u> Note to TSS: Please do NOT use this notice if the application is under a final rejection.	

Complete if Known

--	--	--	--	--	--

[illegible]

*EXAMINER: Initial if reference considered whether or not citation is in conformance with MPER 609. Draw line through citation if not in conformance and not

Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	16/403,349-Conf. #6614
				Filing Date	May 3, 2019
				First Named Inventor	Kyle Thomas Kestner
				Art Unit	3761
				Examiner Name	J. M. Pelham
Sheet	2	of	2	Attorney Docket Number	29178/50736CON1

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	A	Prince Castle LLC, Holding Bin DHB3PT-33DD, June 2015.	
	B	Prince Castle LLC, Original Instructions Operation Manual for Holding Ben DHB3PT-33DD, DHB3SS-33DD, available prior to April 19, 2016	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

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

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Electronic Patent Application Fee Transmittal				
Application Number:		16403349		
Filing Date:		03-May-2019		
Title of Invention:		MULTI-ZONE FOOD HOLDING BIN		
First Named Inventor/Applicant Name:		Kyle Thomas Kestner		
Filer:		Andrew Michael Lawrence/Diane Arpino		
Attorney Docket Number:		29178/50736CON1		
Filed as Large 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:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
SUBMISSION- INFORMATION DISCLOSURE STMT	1806	1	240	240
Total in USD (\$)				240

Electronic Acknowledgement Receipt	
EFS ID:	37387330
Application Number:	16403349
International Application Number:	
Confirmation Number:	6614
Title of Invention:	MULTI-ZONE FOOD HOLDING BIN
First Named Inventor/Applicant Name:	Kyle Thomas Kestner
Customer Number:	4743
Filer:	Andrew Michael Lawrence/Diane Arpino
Filer Authorized By:	Andrew Michael Lawrence
Attorney Docket Number:	29178/50736CON1
Receipt Date:	07-OCT-2019
Filing Date:	03-MAY-2019
Time Stamp:	17:39:53
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$240
RAM confirmation Number	E201907H40225136
Deposit Account	132855
Authorized User	Diane Arpino
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	Information_Disclosure_Statement.PDF	17958	no	2
			e5309bbac486716f0e570ffa828f56ef7d4e6ab2		
Warnings:					
Information:					
2	Information Disclosure Statement (IDS) Form (SB08)	IDS_Citation_by_Applicant_2_References.PDF	34685	no	2
			0c2d8fd932965c9915d0dc33e517fee8f4e26226		
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
3	Non Patent Literature	Holding_Bin_June_2015_NPL.PDF	6478724	no	2
			669303c4c65f08749df719b20635816f85dc5c5e		
Warnings:					
Information:					
4	Non Patent Literature	Original_Instructions_Operation_Manual_NPL.PDF	3975083	no	18
			cad2b4b89f3e60b036b05cdf429675be759d5a1a		
Warnings:					
Information:					
5	Fee Worksheet (SB06)	fee-info.pdf	30582	no	2
			4f2d03b90adff0f5a1855f55ded28a35aa77a573		
Warnings:					
Information:					
Total Files Size (in bytes):			10537032		

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.

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.

Docket No.: 29178/50736CON1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Kyle Thomas Kestner et al.

Application No.: 16/403,349

Confirmation No.: 6614

Filed: May 3, 2019

Art Unit: 3761

For: MULTI-ZONE FOOD HOLDING BIN

Examiner: J. M. Pelham

INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The IDS submitted herewith provides two printed publications:

- Citation No. 1 – “Original Instructions Operation Manual”
- Citation No. 2 – “Holding Bin DHB3PT-33DD”

Citation No. 1 identifies a printing date of June 2015. Applicant admits that the publication of Citation No. 2 was available prior to April 19, 2016. It is not apparent from the disclosure themselves in either of these references that such disclosures are by the inventor or a joint inventor of the present application. (MPEP 2153.01(a)) Therefore it is respectfully submitted that these references be considered for examination under 35 USC 102(a)(1). (See MPEP 2153.01(a))

However, Applicant reserves all right to provide evidence of qualification to any of the exceptions to 102(a)(1) found in 35 USC 102(b)(1) as provided by MPEP 2153 and 2155.

Our Credit Card has been charged in the amount of \$240.00 covering the fee set forth in 37 C.F.R. § 1.17(p). The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 13-2855, under Order No. 29178/50736CON1.

Dated: October 7, 2019

Respectfully submitted,

By /Andrew M. Lawrence/
Andrew M. Lawrence
Registration No.: 46,130
MARSHALL, GERSTEIN & BORUN LLP
233 S. Wacker Drive
6300 Willis Tower
Chicago, Illinois 60606-6357
(312) 474-6300
Attorney for Applicant

<i>Application Number</i> * 16/403,349 *	Application/Control No. 16/403,349	Applicant(s)/Patent under Reexamination Kestner et al.	
	Examiner PELHAM, JOSEPH MOORE	Art Unit 3761	
Document Code - DISQ		Internal Document - DO NOT MAIL	

TERMINAL DISCLAIMER	☒ APPROVED	☐ DISAPPROVED
Date Filed: <u>27 September 2019</u>	This patent is subject to a Terminal Disclaimer	

Approved/Disapproved by:
/LAWANA R HIXON/ Technology Center: OPLC Telephone: (571)272-6074

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875				Application or Docket Number 16/403,349		Filing Date 05/03/2019		☐ To be Mailed		
ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO										
APPLICATION AS FILED - PART I										
		(Column 1)	(Column 2)							
FOR		NUMBER FILED	NUMBER EXTRA	RATE (\$)		FEE (\$)				
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))		N/A	N/A	N/A						
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))		N/A	N/A	N/A						
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		N/A	N/A	N/A						
TOTAL CLAIMS (37 CFR 1.16(i))		minus 20 = *		x \$100 =						
INDEPENDENT CLAIMS (37 CFR 1.16(h))		minus 3 = *		x \$460 =						
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))		If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).								
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))										
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL						
APPLICATION AS AMENDED - PART II										
AMENDMENT	09/27/2019	(Column 1) CLAIMS REMAINING AFTER AMENDMENT	(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE (\$)		ADDITIONAL FEE (\$)			
	Total (37 CFR 1.16(i))	* 26	Minus ** 27	= 0	x \$100 =		0			
	Independent (37 CFR 1.16(h))	* 6	Minus *** 3	= 3	x \$460 =		1380			
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
						TOTAL ADD'L FEE		1380		
AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT	(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE (\$)		ADDITIONAL FEE (\$)			
	Total (37 CFR 1.16(i))	*	Minus **	=	x \$0 =					
	Independent (37 CFR 1.16(h))	*	Minus ***	=	x \$0 =					
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
						TOTAL ADD'L FEE				
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.						LIE				
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".						/TERRY BRYANT/				
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".										
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.										

This collection of information is required by 37 CFR 1.16. 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, 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.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**TERMINAL DISCLAIMER TO OBVIATE A PROVISIONAL DOUBLE
PATENTING REJECTION OVER A PENDING "REFERENCE" APPLICATION**Docket Number (Optional)
29178/50736CON1

In re Application of: Kyle Thomas Kestner et al.

Application No.: 16/403,349-Conf. #6614

Filed: May 3, 2019

For: MULTI-ZONE FOOD HOLDING BIN

For: MULTI-ZONE FOOD HOLDING BIN

The applicant, PRINCE CASTLE LLC, owner of 100 percent interest in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of any patent granted on pending **reference** Application Numbers: **16/403,415**, filed May 3, 2019; **15/985,255**, filed May 21, 2018; and **15/984,760**, filed May 21, 2018.

as the term of any patent granted on said **reference** applications may be shortened by any terminal disclaimer filed prior to the grant of any patent on the pending **reference** application. The applicant hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and any patent granted on the **reference** application are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the applicant does not disclaim the terminal part of any patent granted on the instant application that would extend to the expiration date of the full statutory term of any patent granted on said **reference** application, "as the term of any patent granted on said **reference** applications may be shortened by any terminal disclaimer filed prior to the grant of any patent on the pending **reference** applications," in the event that: any such patent granted on the pending **reference** application expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321, has all claims canceled by a reexamination certificate, is reissued, or is in any manner terminated prior to the expiration of its full statutory term as shortened by any terminal disclaimer filed prior to its grant.

Check either box 1 or 2 below, if appropriate.

1. ☐ The undersigned is the applicant. If the applicant is an assignee, the undersigned is authorized to act on behalf of the assignee.

I hereby acknowledge that any willful false statements made are punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

2. ☒ The undersigned is an attorney or agent of record. Reg. No. 55,064

/Michael A. Chinlund/ September 27, 2019
Signature Date

Michael A. Chinlund
Typed or printed name

Attorney for Applicant(s) (312) 474-6300
Title Telephone Number

- ☒ Terminal disclaimer fee under 37 CFR 1.20(d) is included.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Electronic Patent Application Fee Transmittal				
Application Number:		16403349		
Filing Date:		03-May-2019		
Title of Invention:		MULTI-ZONE FOOD HOLDING BIN		
First Named Inventor/Applicant Name:		Kyle Thomas Kestner		
Filer:		Michael Alexander Chinlund/Diane Arpino		
Attorney Docket Number:		29178/50736CON1		
Filed as Large 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:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
STATUTORY OR TERMINAL DISCLAIMER	1814	1	160	160
Total in USD (\$)				160

Electronic Acknowledgement Receipt	
EFS ID:	37297260
Application Number:	16403349
International Application Number:	
Confirmation Number:	6614
Title of Invention:	MULTI-ZONE FOOD HOLDING BIN
First Named Inventor/Applicant Name:	Kyle Thomas Kestner
Customer Number:	4743
Filer:	Michael Alexander Chinlund/Diane Arpino
Filer Authorized By:	Michael Alexander Chinlund
Attorney Docket Number:	29178/50736CON1
Receipt Date:	27-SEP-2019
Filing Date:	03-MAY-2019
Time Stamp:	11:21:22
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$160
RAM confirmation Number	E20199QB21479742
Deposit Account	132855
Authorized User	Diane Arpino
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		Amendment_in_Response_to_Non-Final_Office_Action_Under_37 CFR1.PDF	119470	yes	16
			4743b55572fba58800d150fa7e9f25d18da71697		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Applicant Arguments/Remarks Made in an Amendment		12	16	
	Claims		2	11	
	Amendment/Req. Reconsideration-After Non-Final Reject		1	1	
Warnings:					
Information:					
2	Terminal Disclaimer Filed	Terminal_Disclaimer.PDF	21711	no	2
			55106c77da3c0f3aa600822e18abb145790fc0b0		
Warnings:					
Information:					
3	Terminal Disclaimer Filed	Terminal_Disclaimer3.PDF	20941	no	1
			eca1807b46fc24b01f2e31047246f0106b8316da		
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	30665	no	2
			f72b43b6ea5bd5cefadba6d32a9d325b944999ab		
Warnings:					
Information:					
Total Files Size (in bytes):			192787		

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.

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.

REMARKS

This paper is presented in response to the non-final office action dated June 27, 2019, in which (a) claims 1-27 were pending; (b) claims 1, 2, 5, 8, and 10-25 were rejected on the ground of nonstatutory double patenting over claims 1-8 of U.S. Patent No. 9,976,750; (c) claims 1-4, 8, and 10-25 were rejected on the ground of nonstatutory double patenting over claims 1-8 of U.S. Patent No. 9,980,322; (d) claims 1-27 were provisionally rejected on the ground of nonstatutory double patenting over claims 36-43, 46-49, and 71-73 of copending application no. 15/984,760; (e) claims 1-27 were provisionally rejected on the ground of nonstatutory double patenting over claims 34-40, 43-64, and 67 of copending application no. 15/985,255; (f) claims 1-27 were provisionally rejected on the ground of nonstatutory double patenting over claims 1-27 of copending application no. 16/403,415; (g) claims 3-7, 19, and 20 were rejected under 35 U.S.C. §112 as allegedly being indefinite; (h) claims 1-3, 6-9, 12, 14-16, 22, 23, and 25 were rejected under 35 U.S.C. §102 as allegedly being anticipated by U.S. Patent Publication No. 2011/0114618 ("the '618 publication"); and (i) claims 13 and 24 were rejected under 35 U.S.C. §103 as allegedly being obvious over the '618 publication.

The applicant respectfully traverses the rejections and requests that they be withdrawn.

Claims 1, 4, 10, 17, 19, 20, and 26 are amended. Support for the amendments to claims 1, 4, 10, 17, 19, 20, and 26 may be found in the specification and claims as originally filed. For example, support may be found at least in original claims 1-27. No new matter is added. As a result, claims 1-27 remain pending and at issue.

The excess claim fees for two additional independent claims above three is included herewith.

This paper is timely filed.

The rejections are addressed below in the order in which they appear in the office action.

Double Patenting Rejections

The applicant respectfully submits that the nonstatutory double patenting rejections are addressed by the terminal disclaimer filed herewith. For this reason, the applicant respectfully requests withdrawal of the double patenting rejections.

35 U.S.C. §112 Rejections

The applicant respectfully submits that the minor antecedent basis errors identified in the office action do not render the claims 19 and 20 indefinite under § 112 because a claim is considered definite as long as “the scope of the claims is clear so the public is informed of the boundaries of what constitutes infringement of the patent.” M.P.E.P § 2173. Here, one of ordinary skill in the art would readily understand what was intended by the term “the ledge,” as shown by the examiner’s own comments regarding these terms at page 5 of the office action. Moreover, in view of the amendments presented herein, the antecedent basis errors have been corrected. For this reason, the applicant respectfully requests withdrawal of the rejections of claims 19 and 20.

The applicant respectfully traverses the rejections of claims 3-7 as being indefinite. The office action alleges that claim 3 recites food holding “bays” and that claim 1 recites only food holding “zones.” The applicant respectfully disagrees. Independent claim 1 recites “the first food holding zone including a **first food holding bay** and a **second food holding bay**, each of the first and second food holding bays being configured to receive a food holding tray,” in lines 16-18, and “the second food holding zone including a **third food holding bay** and a **fourth food holding bay**, each of the third and fourth food holding bays being configured to receive a food holding tray,” in lines 22-24. Emphasis added. Because claim 1 recites food holding bays, the recitation of food holding bays in claim 3 is not indefinite. For this reason, the applicant respectfully requests withdrawal of the rejections of claims 3-7.

35 U.S.C. §102/103 Rejections

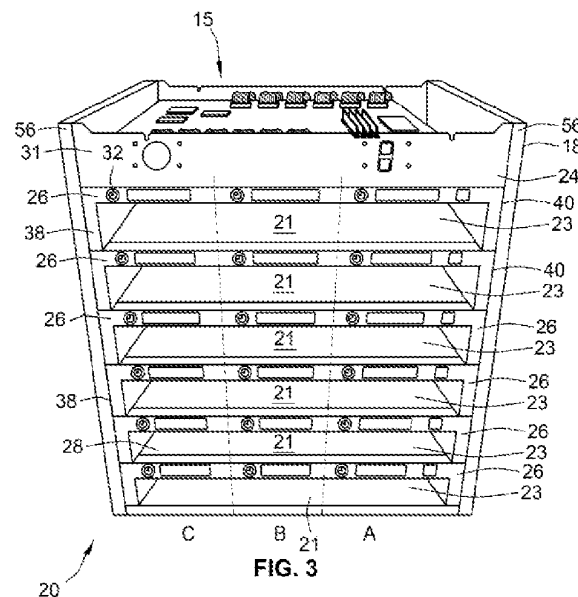
The applicant respectfully traverses the rejections of claims 1-3, 6-9, 12-16, and 22-25 as allegedly being anticipated by, or obvious over, the ‘618 publication because the ‘618 publication fails to disclose or suggest all claim limitations. More specifically, the ‘618 publication fails to disclose or suggest at least a multi-zone food holding bin comprising a first food holding zone having an independently controllable first heating element disposed at a top portion of the first food holding compartment, and an independently controllable second heating element disposed at a bottom portion of the first food holding compartment, let alone a multi-zone food holding bin comprising such a first food holding zone in combination with a second food holding zone as claimed.

The claimed multi-zone food holding bin includes a first food holding compartment having a first food holding zone that includes an independently controllable first heating element disposed at a top portion of the first food holding compartment, and an

independently controllable second heating element disposed at a bottom portion of the first food holding compartment. Having heating elements at the top of the food holding compartment and at the bottom of the food holding compartments, each of which is independently controllable from the other, advantageously allows customization of a vertical temperature profile within the food holding zone. In other words, temperature in the food holding zone may be controlled vertically, e.g., increased from bottom to top, or *vice versa*, depending on the type of food located in the food holding zone. See e.g., paragraphs [0035] and [0036] of the instant application.

The '618 publication fails to disclose or suggest a first heating element at a top portion of a food holding zone and a second heating element at a bottom portion of the food holding zone, the first and second heating elements being independently controllable from one another.

The '618 publication discloses a food holding cabinet including food holding compartments 23, as illustrated in FIG. 3, which is reproduced below.



The office action alleges that the '618 publication discloses "independently controllable first . . . and second heating element[s] disposed [respectively at] top . . . and . . . bottom portion[s] of the first food holding compartment," without further explanation. See the office action at pages 5 and 6. Based on the office action's arguments with respect to claims

12, 16, and 22 at page 6 (where the office action states “the radiant heaters 50 shown mounted in shelves 21 in Fig. 10, when implemented in the multi-compartment food holding bin of Figs. 1 and 2, in independently controlled zones, heat radiantly from above and conductively from below”), the applicant understands that the office action’s argument is that placing the heaters 50 shown in FIG. 10 into each shelf 21 of FIG. 3 results in each temperature controlled zone (A,B,C) having an upper heating element and a lower heating element (at least the zones between shelves would have upper and lower heating elements). However, there is no teaching or suggestion in the ‘618 reference that the upper and lower heating elements are, or could be, independently controllable within each food holding zone A, B, and C. The office action mischaracterizes the teaching of the ‘618 reference that each zone (A,B,C) is independently controllable in temperature (see e.g., paragraph [0022] which states that “temperature control of the separate zones A, B, and C is accomplished by using separate temperature control elements”). This paragraph (and following paragraph [0023]) only teaches that the temperature in each zone (A,B,C) may be different from an adjacent zone. There is no teaching, express or implied, that upper and lower heating elements within a single zone are independently controllable. As a result, the ‘618 publication fails to disclose or suggest a first heating element at a top portion of a food holding zone and a second heating element at a bottom portion of the food holding zone, ***the first and second heating elements being independently controllable from one another***, as recited in the pending claims. Thus, none of the pending claims can be anticipated by, or rendered obvious over, the ‘618 publication. For this reason, the applicant respectfully requests withdrawal of the rejections of claims 1-3, 6-9, 12-16, and 22-25.

Claims 4, 5, 10, 11, 17-21, 26, and 27

Claims 4, 5, 10, 11, 17-21, 26, and 27 were rejected on the ground of nonstatutory double patenting and/or 35 U.S.C. §112 issues only. Claims 4, 5, 10, 11, 17-21, 26, and 27 did not include any art based rejections. As a result, the applicant understands that claims 4, 5, 10, 11, 17-21, 26, and 27 were found to be allowable in substance. By this amendment, the nonstatutory double patenting and 35 U.S.C. §112 issues are addressed. Claims 4, 10, 17, 21, and 26 are rewritten in independent form. Thus, the applicant respectfully submits that claims 4, 5, 10, 11, 17-21, 26, and 27 are in allowable form.

Conclusion

In view of the foregoing amendments and remarks, the applicant believes the pending application is in condition for allowance.

Application No. 16/403,349
Amendment dated September 27, 2019
Reply to Office Action of June 27, 2019

Docket No.: 29178/50736CON1

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which, should have been filed wherewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 13-2855, under Order No. 29178/50477CON1.

Dated: September 27, 2019

Respectfully submitted,

By ___/Michael A. Chinlund/_____
Michael A. Chinlund
Registration No.: 55,064
MARSHALL, GERSTEIN & BORUN LLP
233 S. Wacker Drive
6300 Willis Tower
Chicago, Illinois 60606-6357
(312) 474-6300
Attorney for Applicant

AMENDMENTS TO THE CLAIMS

1. (Original) A multi-zone food holding bin comprising:

a chassis having a top panel, a first side panel, a second side panel, a bottom panel, a front face, and an opposing rear face;

a first food holding compartment within the chassis, the first food holding compartment being defined by the first side panel, the second side panel, and a shelf, the first food holding compartment having a first opening, the first opening of the first food holding compartment being configured to allow food items to be placed into and removed from the first food holding compartment;

a substantially planar surface forming a top surface of the shelf and thus a bottom surface of the first food holding compartment, the substantially planar surface extending completely to the first opening of the first food holding compartment, and the substantially planar surface comprising a thermally conductive material;

a first food holding zone formed in the first food holding compartment, the first food holding zone having an independently controllable first heating element disposed at a top portion of the first food holding compartment, and an independently controllable second heating element disposed at a bottom portion of the first food holding compartment, the first food holding zone including a first food holding bay and a second food holding bay, each of the first and second food holding bays being configured to receive a food holding tray; and

a second food holding zone formed in the first food holding compartment, the second food holding zone having an independently controllable third heating element disposed at the top portion of the first food holding compartment and an independently controllable fourth heating element disposed at the bottom portion of the first food holding compartment, the second food holding zone including a third food holding bay and a fourth food holding bay, each of the third and fourth food holding bays being configured to receive a food holding tray,

wherein the first food holding zone and the second food holding zone are adjacent one another across the substantially planar surface and the first food holding zone is configured to maintain a first temperature and the second food holding zone is configured to maintain a second temperature, the first temperature and the second temperature capable of being different than one another.

2. (Original) The food holding bin of claim 1, further comprising:

a second food holding compartment disposed below the first food holding compartment within the chassis, the second food holding compartment being defined by the first side panel, the second side panel, and the shelf, the second food holding compartment having a first opening, the first opening of the second food holding compartment being configured to allow food items to be placed into and removed from the food holding compartment; and

a controller operatively coupled to the second heating element and to the fourth heating element, the controller being configured to independently operate the second heating element and the fourth heating element

wherein the shelf is located between the first and second food holding compartments, the shelf comprises a first side and a second side, the first side facing into the first food holding compartment, the second side facing into the second food holding compartment, and the second and fourth heating elements are disposed in the shelf and in thermal communication with the first side, the second and fourth heating elements being capable of providing different amounts of heat energy into the first and second food holding zones of the first food holding compartment.

3. (Original) The food holding bin of claim 1, further comprising a first bezel attached to the chassis, the first bezel comprising dedicated controls and/or dedicated displays for each of the first, second, third, and fourth food holding bays.

4. (Currently Amended) ~~[[The]]~~ A multi-zone food holding bin of claim 3,
comprising:

a chassis having a top panel, a first side panel, a second side panel, a bottom panel,
a front face, and an opposing rear face;

a first food holding compartment within the chassis, the first food holding
compartment being defined by the first side panel, the second side panel, and a shelf, the
first food holding compartment having a first opening, the first opening of the first food
holding compartment being configured to allow food items to be placed into and removed
from the first food holding compartment;

a substantially planar surface forming a top surface of the shelf and thus a bottom
surface of the first food holding compartment, the substantially planar surface extending

completely to the first opening of the first food holding compartment, and the substantially planar surface comprising a thermally conductive material;

a first food holding zone formed in the first food holding compartment, the first food holding zone having an independently controllable first heating element disposed at a top portion of the first food holding compartment, and an independently controllable second heating element disposed at a bottom portion of the first food holding compartment, the first food holding zone including a first food holding bay and a second food holding bay, each of the first and second food holding bays being configured to receive a food holding tray; and

a second food holding zone formed in the first food holding compartment, the second food holding zone having an independently controllable third heating element disposed at the top portion of the first food holding compartment and an independently controllable fourth heating element disposed at the bottom portion of the first food holding compartment, the second food holding zone including a third food holding bay and a fourth food holding bay, each of the third and fourth food holding bays being configured to receive a food holding tray,

wherein the first food holding zone and the second food holding zone are adjacent one another across the substantially planar surface and the first food holding zone is configured to maintain a first temperature and the second food holding zone is configured to maintain a second temperature, the first temperature and the second temperature capable of being different than one another, and

wherein the first bezel is set forward from the shelf by a space.

5. (Original) The food holding bin of claim 4, wherein the space is configured to allow a latch to rotate from a locked position to an unlocked position to release lids held on lid holding ledges elevated above the substantially planar surface.

6. (Original) The food holding bin of claim 3, wherein the first bezel comprises dedicated displays and the dedicated display displays a temperature setting for a corresponding food holding bay.

7. (Original) The food holding bin of claim 3, wherein the dedicated display displays additional information about a food item stored in the corresponding food holding bay.

8. (Original) The food holding bin of claim 2, wherein the first and second food holding compartments each have a second opening, uncovered and located at the rear

face of the chassis, and the substantially planar bottom surface is configured to allow food items to be placed on the substantially planar surface through the first opening and removed from the planar and bottom surface from the second opening.

9. (Original) The food holding bin of claim 8, wherein the first bezel is located proximate the front face of the chassis, the food holding bin further comprising a second bezel located proximate the opposing rear face of the chassis.

10. (Currently Amended) ~~[[The]]~~ A multi-zone food holding bin of claim 1,
comprising:

a chassis having a top panel, a first side panel, a second side panel, a bottom panel,
a front face, and an opposing rear face;

a first food holding compartment within the chassis, the first food holding
compartment being defined by the first side panel, the second side panel, and a shelf, the
first food holding compartment having a first opening, the first opening of the first food
holding compartment being configured to allow food items to be placed into and removed
from the first food holding compartment;

~~further comprising~~ a rotatable latch disposed adjacent the first opening;

a substantially planar surface forming a top surface of the shelf and thus a bottom
surface of the first food holding compartment, the substantially planar surface extending
completely to the first opening of the first food holding compartment, and the substantially
planar surface comprising a thermally conductive material;

a first food holding zone formed in the first food holding compartment, the first food
holding zone having an independently controllable first heating element disposed at a top
portion of the first food holding compartment, and an independently controllable second
heating element disposed at a bottom portion of the first food holding compartment, the first
food holding zone including a first food holding bay and a second food holding bay, each of
the first and second food holding bays being configured to receive a food holding tray; and

a second food holding zone formed in the first food holding compartment, the second
food holding zone having an independently controllable third heating element disposed at
the top portion of the first food holding compartment and an independently controllable fourth
heating element disposed at the bottom portion of the first food holding compartment, the
second food holding zone including a third food holding bay and a fourth food holding bay,

each of the third and fourth food holding bays being configured to receive a food holding tray.

wherein the first food holding zone and the second food holding zone are adjacent one another across the substantially planar surface and the first food holding zone is configured to maintain a first temperature and the second food holding zone is configured to maintain a second temperature, the first temperature and the second temperature capable of being different than one another.

11. (Original) The food holding bin of claim 10, wherein the latch is located between the first food holding bay and the second food holding bay.

12. (Original) The food holding bin of claim 1, wherein the second independently controllable heating elements provides heat energy through conduction.

13. (Original) The food holding bin of claim 1, wherein both the first and second independently controllable heating elements comprise a resistive wire.

14. (Original) The food holding bin of claim 1, wherein the substantially planar surface is a continuous surface.

15. (Original) The food holding bin of claim 14, wherein the substantially planar surface is substantially free of any dividing walls or other structure between the first, second, third, and fourth food holding bays.

16. (Original) The food holding bin of claim 1, wherein the first independently controllable heating element comprises a radiant heating source and the second independently controllable heating element provides heat energy through conduction.

17. (Currently Amended) ~~[[The]]~~ A multi-zone food holding bin of claim 1,
comprising:

a chassis having a top panel, a first side panel, a second side panel, a bottom panel,
a front face, and an opposing rear face;

a first food holding compartment within the chassis, the first food holding
compartment being defined by the first side panel, the second side panel, and a shelf, the
first food holding compartment having a first opening, the first opening of the first food
holding compartment being configured to allow food items to be placed into and removed
from the first food holding compartment;

a substantially planar surface forming a top surface of the shelf and thus a bottom surface of the first food holding compartment, the substantially planar surface extending completely to the first opening of the first food holding compartment, and the substantially planar surface comprising a thermally conductive material;

a first food holding zone formed in the first food holding compartment, the first food holding zone having an independently controllable first heating element disposed at a top portion of the first food holding compartment, and an independently controllable second heating element disposed at a bottom portion of the first food holding compartment, the first food holding zone including a first food holding bay and a second food holding bay, each of the first and second food holding bays being configured to receive a food holding tray; and

a second food holding zone formed in the first food holding compartment, the second food holding zone having an independently controllable third heating element disposed at the top portion of the first food holding compartment and an independently controllable fourth heating element disposed at the bottom portion of the first food holding compartment, the second food holding zone including a third food holding bay and a fourth food holding bay, each of the third and fourth food holding bays being configured to receive a food holding tray.

wherein the first food holding zone and the second food holding zone are adjacent one another across the substantially planar surface and the first food holding zone is configured to maintain a first temperature and the second food holding zone is configured to maintain a second temperature, the first temperature and the second temperature capable of being different than one another, and

wherein each food holding bay further ~~comprising~~ comprises a dedicated lid holding shelf elevated above the substantially planar bottom surface in the first food holding compartment, the dedicated lid holding shelf being configured to receive and store a lid for a food holding tray.

18. (Original) The food holding bin of claim 17, wherein a rotatable latch disposed adjacent the first opening is rotatable between a locked position in which the latch prevents a lid from being removed from the lid holding shelf, and an unlocked position in which the latch allows removal of a lid from the lid holding shelf, the latch being biased to the locked position by gravity.

19. (Currently Amended) The food holding bin of claim 17, wherein the ~~ledge lid~~ holding shelf comprises sheet metal.

20. (Currently Amended) The food holding bin of claim 17, wherein the ~~ledge lid~~ holding shelf comprises a wire form.

21. (Currently Amended) [[The]] A multi-zone food holding bin ~~of claim 1,~~ comprising:

a chassis having a top panel, a first side panel, a second side panel, a bottom panel, a front face, and an opposing rear face;

a first food holding compartment within the chassis, the first food holding compartment being defined by the first side panel, the second side panel, and a shelf, the first food holding compartment having a first opening, the first opening of the first food holding compartment being configured to allow food items to be placed into and removed from the first food holding compartment;

a substantially planar surface forming a top surface of the shelf and thus a bottom surface of the first food holding compartment, the substantially planar surface extending completely to the first opening of the first food holding compartment, and the substantially planar surface comprising a thermally conductive material;

a first food holding zone formed in the first food holding compartment, the first food holding zone having an independently controllable first heating element disposed at a top portion of the first food holding compartment, and an independently controllable second heating element disposed at a bottom portion of the first food holding compartment, the first food holding zone including a first food holding bay and a second food holding bay, each of the first and second food holding bays being configured to receive a food holding tray; and

a second food holding zone formed in the first food holding compartment, the second food holding zone having an independently controllable third heating element disposed at the top portion of the first food holding compartment and an independently controllable fourth heating element disposed at the bottom portion of the first food holding compartment, the second food holding zone including a third food holding bay and a fourth food holding bay, each of the third and fourth food holding bays being configured to receive a food holding tray,

wherein the first food holding zone and the second food holding zone are adjacent one another across the substantially planar surface and the first food holding zone is

configured to maintain a first temperature and the second food holding zone is configured to maintain a second temperature, the first temperature and the second temperature capable of being different than one another, and

wherein the first independently controllable heating element is adapted to output more heat energy than the second heating element.

22. (Original) The food holding bin of claim 1, wherein the first independently controllable heating element is a radiant heating element.

23. (Original) The food holding bin of claim 1, wherein the substantially planar surface comprises aluminum.

24. (Original) The food holding bin of claim 1, further comprising a food holding tray resting on the substantially planar surface.

25. (Original) The food holding bin of claim 1, the first food holding zone and the second food holding zone being heated to different temperatures.

26. (Currently Amended) ~~[[The]]~~ A multi-zone food holding bin of claim 2,
a chassis having a top panel, a first side panel, a second side panel, a bottom panel,
a front face, and an opposing rear face;

a first food holding compartment within the chassis, the first food holding compartment being defined by the first side panel, the second side panel, and a shelf, the first food holding compartment having a first opening, the first opening of the first food holding compartment being configured to allow food items to be placed into and removed from the first food holding compartment;

a substantially planar surface forming a top surface of the shelf and thus a bottom surface of the first food holding compartment, the substantially planar surface extending completely to the first opening of the first food holding compartment, and the substantially planar surface comprising a thermally conductive material;

a first food holding zone formed in the first food holding compartment, the first food holding zone having an independently controllable first heating element disposed at a top portion of the first food holding compartment, and an independently controllable second heating element disposed at a bottom portion of the first food holding compartment, the first food holding zone including a first food holding bay and a second food holding bay, each of the first and second food holding bays being configured to receive a food holding tray; and

a second food holding zone formed in the first food holding compartment, the second food holding zone having an independently controllable third heating element disposed at the top portion of the first food holding compartment and an independently controllable fourth heating element disposed at the bottom portion of the first food holding compartment, the second food holding zone including a third food holding bay and a fourth food holding bay, each of the third and fourth food holding bays being configured to receive a food holding tray,

wherein the first food holding zone and the second food holding zone are adjacent one another across the substantially planar surface and the first food holding zone is configured to maintain a first temperature and the second food holding zone is configured to maintain a second temperature, the first temperature and the second temperature capable of being different than one another,

further comprising a second food holding compartment disposed below the first food holding compartment within the chassis, the second food holding compartment being defined by the first side panel, the second side panel, and the shelf, the second food holding compartment having a first opening, the first opening of the second food holding compartment being configured to allow food items to be placed into and removed from the food holding compartment; and

a controller operatively coupled to the second heating element and to the fourth heating element, the controller being configured to independently operate the second heating element and the fourth heating element

wherein the shelf is located between the first and second food holding compartments, the shelf comprises a first side and a second side, the first side facing into the first food holding compartment, the second side facing into the second food holding compartment, and the second and fourth heating elements are disposed in the shelf and in thermal communication with the first side, the second and fourth heating elements being capable of providing different amounts of heat energy into the first and second food holding zones of the first food holding compartment, and

wherein the shelf comprising comprises an upper thermally conductive plate, a lower thermally conductive plate, a fifth heating element, and a sixth heating element, the fifth and sixth heating elements being disposed between the upper thermally conductive plate and the lower thermally conductive plate, the second and fourth heating elements being in thermal communication with the upper thermally conductive plate and the fifth and sixth heating

elements being in thermal communication with the lower thermally conductive plate, the fifth and sixth heating elements providing heat energy into the second food holding compartment.

27. (Original) The food holding bin of claim 26, wherein an insulative material is provided between the second and the fifth heating elements.

Docket No.: 29178/50736CON1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Kyle Thomas Kestner et al.

Application No.: 16/403,349

Confirmation No.: 6614

Filed: May 3, 2019

Art Unit: 3761

For: MULTI-ZONE FOOD HOLDING BIN

Examiner: J. M. Pelham

AMENDMENT IN RESPONSE TO NON-FINAL OFFICE ACTION UNDER 37 C.F.R. § 1.111

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INTRODUCTORY COMMENTS

In response to the Office Action dated June 27, 2019, please amend the above-identified U.S. patent application as follows:

Amendments to the Claims are reflected in the listing of claims, which begins on page 2 of this paper.

Remarks begin on page 12 of this paper.

TERMINAL DISCLAIMER TO OBIATE A DOUBLE PATENTING REJECTION OVER A "PRIOR" PATENT	Docket Number (Optional) 29178/50736CON1
---	---

In re Application of: Kyle Thomas Kestner et al.

Application No.: 16/403,349-Conf. #6614

Filed: May 3, 2019

For: MULTI-ZONE FOOD HOLDING BIN

The applicant, PRINCE CASTLE LLC, owner of 100 percent interest in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of **prior patent** No. (see attached) as the term of said **prior patent** is presently shortened by any terminal disclaimer. The applicant hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the **prior patent** are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the applicant does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term of the **prior patent**, "as the term of said **prior patent** is presently shortened by any terminal disclaimer," in the event that said **prior patent** later:

- expires for failure to pay a maintenance fee;
- is held unenforceable;
- is found invalid by a court of competent jurisdiction;
- is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321;
- has all claims canceled by a reexamination certificate;
- is reissued; or
- is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

Check either box 1 or 2 below, if appropriate.

1. ☐ The undersigned is the applicant. If the applicant is an assignee, the undersigned is authorized to act on behalf of the assignee.

I hereby acknowledge that any willful false statements made are punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

2. ☒ The undersigned is an attorney or agent of record. Reg. No. 55,064

/Michael A. Chinlund/
Signature

Michael A. Chinlund
Typed or printed name

Attorney for Applicant(s)
Title

September 27, 2019
Date

(312) 474-6300
Telephone Number

☒ Terminal disclaimer fee under 37 CFR 1.20(d) included.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

SUPPLEMENTAL SHEET FOR TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING REJECTION OVER A "PRIOR" PATENT	Docket Number (Optional) 29178/50736CON1
--	--

Prior patent Nos. applicable to this terminal disclaimer (referenced on first page):

9,976,750
 9,980,322

REMARKS

This paper is presented in response to the non-final office action dated June 27, 2019, in which (a) claims 1-27 were pending; (b) claims 1, 2, 5, 8, and 10-25 were rejected on the ground of nonstatutory double patenting over claims 1-8 of U.S. Patent No. 9,976,750; (c) claims 1-4, 8, and 10-25 were rejected on the ground of nonstatutory double patenting over claims 1-8 of U.S. Patent No. 9,980,322; (d) claims 1-27 were provisionally rejected on the ground of nonstatutory double patenting over claims 36-43, 46-49, and 71-73 of copending application no. 15/984,760; (e) claims 1-27 were provisionally rejected on the ground of nonstatutory double patenting over claims 34-40, 43-64, and 67 of copending application no. 15/985,255; (f) claims 1-27 were provisionally rejected on the ground of nonstatutory double patenting over claims 1-27 of copending application no. 16/403,415; (g) claims 3-7, 19, and 20 were rejected under 35 U.S.C. §112 as allegedly being indefinite; (h) claims 1-3, 6-9, 12, 14-16, 22, 23, and 25 were rejected under 35 U.S.C. §102 as allegedly being anticipated by U.S. Patent Publication No. 2011/0114618 ("the '618 publication"); and (i) claims 13 and 24 were rejected under 35 U.S.C. §103 as allegedly being obvious over the '618 publication.

The applicant respectfully traverses the rejections and requests that they be withdrawn.

Claims 1, 4, 10, 17, 19, 20, and 26 are amended. Support for the amendments to claims 1, 4, 10, 17, 19, 20, and 26 may be found in the specification and claims as originally filed. For example, support may be found at least in original claims 1-27. No new matter is added. As a result, claims 1-27 remain pending and at issue.

The excess claim fees for two additional independent claims above three is included herewith.

This paper is timely filed.

The rejections are addressed below in the order in which they appear in the office action.

Double Patenting Rejections

The applicant respectfully submits that the nonstatutory double patenting rejections are addressed by the terminal disclaimer filed herewith. For this reason, the applicant respectfully requests withdrawal of the double patenting rejections.

35 U.S.C. §112 Rejections

The applicant respectfully submits that the minor antecedent basis errors identified in the office action do not render the claims 19 and 20 indefinite under § 112 because a claim is considered definite as long as “the scope of the claims is clear so the public is informed of the boundaries of what constitutes infringement of the patent.” M.P.E.P § 2173. Here, one of ordinary skill in the art would readily understand what was intended by the term “the ledge,” as shown by the examiner’s own comments regarding these terms at page 5 of the office action. Moreover, in view of the amendments presented herein, the antecedent basis errors have been corrected. For this reason, the applicant respectfully requests withdrawal of the rejections of claims 19 and 20.

The applicant respectfully traverses the rejections of claims 3-7 as being indefinite. The office action alleges that claim 3 recites food holding “bays” and that claim 1 recites only food holding “zones.” The applicant respectfully disagrees. Independent claim 1 recites “the first food holding zone including a **first food holding bay** and a **second food holding bay**, each of the first and second food holding bays being configured to receive a food holding tray,” in lines 16-18, and “the second food holding zone including a **third food holding bay** and a **fourth food holding bay**, each of the third and fourth food holding bays being configured to receive a food holding tray,” in lines 22-24. Emphasis added. Because claim 1 recites food holding bays, the recitation of food holding bays in claim 3 is not indefinite. For this reason, the applicant respectfully requests withdrawal of the rejections of claims 3-7.

35 U.S.C. §102/103 Rejections

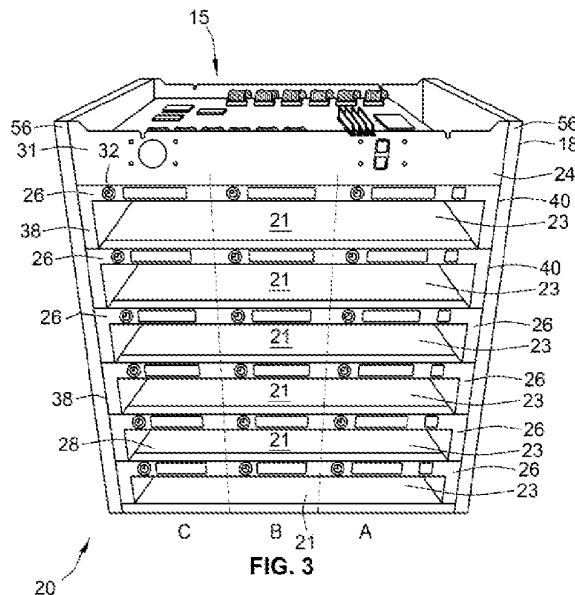
The applicant respectfully traverses the rejections of claims 1-3, 6-9, 12-16, and 22-25 as allegedly being anticipated by, or obvious over, the ‘618 publication because the ‘618 publication fails to disclose or suggest all claim limitations. More specifically, the ‘618 publication fails to disclose or suggest at least a multi-zone food holding bin comprising a first food holding zone having an independently controllable first heating element disposed at a top portion of the first food holding compartment, and an independently controllable second heating element disposed at a bottom portion of the first food holding compartment, let alone a multi-zone food holding bin comprising such a first food holding zone in combination with a second food holding zone as claimed.

The claimed multi-zone food holding bin includes a first food holding compartment having a first food holding zone that includes an independently controllable first heating element disposed at a top portion of the first food holding compartment, and an

independently controllable second heating element disposed at a bottom portion of the first food holding compartment. Having heating elements at the top of the food holding compartment and at the bottom of the food holding compartments, each of which is independently controllable from the other, advantageously allows customization of a vertical temperature profile within the food holding zone. In other words, temperature in the food holding zone may be controlled vertically, e.g., increased from bottom to top, or *vice versa*, depending on the type of food located in the food holding zone. See e.g., paragraphs [0035] and [0036] of the instant application.

The '618 publication fails to disclose or suggest a first heating element at a top portion of a food holding zone and a second heating element at a bottom portion of the food holding zone, the first and second heating elements being independently controllable from one another.

The '618 publication discloses a food holding cabinet including food holding compartments 23, as illustrated in FIG. 3, which is reproduced below.



The office action alleges that the '618 publication discloses "independently controllable first . . . and second heating element[s] disposed [respectively at] top . . . and . . . bottom portion[s] of the first food holding compartment," without further explanation. See the office action at pages 5 and 6. Based on the office action's arguments with respect to claims

12, 16, and 22 at page 6 (where the office action states “the radiant heaters 50 shown mounted in shelves 21 in Fig. 10, when implemented in the multi-compartment food holding bin of Figs. 1 and 2, in independently controlled zones, heat radiantly from above and conductively from below”), the applicant understands that the office action’s argument is that placing the heaters 50 shown in FIG. 10 into each shelf 21 of FIG. 3 results in each temperature controlled zone (A,B,C) having an upper heating element and a lower heating element (at least the zones between shelves would have upper and lower heating elements). However, there is no teaching or suggestion in the ‘618 reference that the upper and lower heating elements are, or could be, independently controllable within each food holding zone A, B, and C. The office action mischaracterizes the teaching of the ‘618 reference that each zone (A,B,C) is independently controllable in temperature (see e.g., paragraph [0022] which states that “temperature control of the separate zones A, B, and C is accomplished by using separate temperature control elements”). This paragraph (and following paragraph [0023]) only teaches that the temperature in each zone (A,B,C) may be different from an adjacent zone. There is no teaching, express or implied, that upper and lower heating elements within a single zone are independently controllable. As a result, the ‘618 publication fails to disclose or suggest a first heating element at a top portion of a food holding zone and a second heating element at a bottom portion of the food holding zone, ***the first and second heating elements being independently controllable from one another***, as recited in the pending claims. Thus, none of the pending claims can be anticipated by, or rendered obvious over, the ‘618 publication. For this reason, the applicant respectfully requests withdrawal of the rejections of claims 1-3, 6-9, 12-16, and 22-25.

Claims 4, 5, 10, 11, 17-21, 26, and 27

Claims 4, 5, 10, 11, 17-21, 26, and 27 were rejected on the ground of nonstatutory double patenting and/or 35 U.S.C. §112 issues only. Claims 4, 5, 10, 11, 17-21, 26, and 27 did not include any art based rejections. As a result, the applicant understands that claims 4, 5, 10, 11, 17-21, 26, and 27 were found to be allowable in substance. By this amendment, the nonstatutory double patenting and 35 U.S.C. §112 issues are addressed. Claims 4, 10, 17, 21, and 26 are rewritten in independent form. Thus, the applicant respectfully submits that claims 4, 5, 10, 11, 17-21, 26, and 27 are in allowable form.

Conclusion

In view of the foregoing amendments and remarks, the applicant believes the pending application is in condition for allowance.

Application No. 16/403,349
Amendment dated September 27, 2019
Reply to Office Action of June 27, 2019

Docket No.: 29178/50736CON1

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which, should have been filed wherewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 13-2855, under Order No. 29178/50477CON1.

Dated: September 27, 2019

Respectfully submitted,

By ___/Michael A. Chinlund/_____
Michael A. Chinlund
Registration No.: 55,064
MARSHALL, GERSTEIN & BORUN LLP
233 S. Wacker Drive
6300 Willis Tower
Chicago, Illinois 60606-6357
(312) 474-6300
Attorney for Applicant



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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/403,349	05/03/2019	Kyle Thomas Kestner	29178/50736CON1	6614
4743	7590	06/27/2019	EXAMINER	
MARSHALL, GERSTEIN & BORUN LLP			PELHAM, JOSEPH MOORE	
233 SOUTH WACKER DRIVE				
6300 WILLIS TOWER				
CHICAGO, IL 60606-6357				
			ART UNIT	PAPER NUMBER
			3761	
			NOTIFICATION DATE	DELIVERY MODE
			06/27/2019	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):

mgbdoCKET@marshallip.com

Notice of Pre-AIA or AIA Status

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Double Patenting

Claims 1, 2, 5, 8, and 10-25 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 9,976,750. Although the claims at issue are not identical, they are not patentably distinct from each other because instant claim 1 merely broadens the scope of '750 claim 1, relegating to dependent claims limitations recited in '750 claim 1.

Claims 1-4, 8, and 10-25 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 9,980,322. Although the claims at issue are not identical, they are not patentably distinct from each other because instant claim 1 substantively merely broadens the scope of '322 claim 1, by relegating to dependent claims the "aluminum" planar surface material, "a food holding tray," and heating "radiantly from above" and "conductively from below" limitations recited in '322 claim 1.

Claims 1-27 are ***provisionally*** rejected on the ground of nonstatutory double patenting as being unpatentable over claims 36-43, 46-69, and 71-73 of copending Application No. 15/984,760 (reference application). Although the claims at issue are not identical, they are not patentably distinct from each other because instant claim 1 substantively just broadens the scope of '760 independent claim 36, and otherwise redistributes limitations of the cited '760 claims.

This is a provisional nonstatutory double patenting rejection because the patentably indistinct claims have not in fact been patented.

Claims 1-27 are **provisionally** rejected on the ground of nonstatutory double patenting as being unpatentable over claims 34-40, 43-64, and 67 of copending Application No. 15/985,255 (reference application). Although the claims at issue are not identical, they are not patentably distinct from each other because instant claim 1 just broadens the scope of '255 independent claim 34 by omitting the lid holding shelves, relegating "the second food holding compartment" and "lid holding shelves" to dependent claims, otherwise omits heating elements at the bottom of the second food holding compartment, and redistributes limitations of the cited '255 claims.

This is a provisional nonstatutory double patenting rejection because the patentably indistinct claims have not in fact been patented.

Claims 1-27 are **provisionally** rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-27 of copending Application No. 16/403,415 (reference application). Although the claims at issue are not identical, they are not patentably distinct from each other because the instant claims broaden the scope of the '415 claims by omitting altogether the "**radiant** third heating element" and the "**conductive** fourth heating element," as recited in claim 1 of '415, and reciting instead just the "radiant first" and "conductive second heating element[s]" in instant claims 12, 16, and 22. While instant claim 1 recites two "food holding bays" in each heating zone, this implicates no necessary structure beyond a zone width, or depth, able to accommodate two trays, which is clearly satisfied by the heating zones of '415.

This is a provisional nonstatutory double patenting rejection because the patentably indistinct claims have not in fact been patented.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise

extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on nonstatutory double patenting provided the reference application or patent either is shown to be commonly owned with the examined application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. See MPEP § 717.02 for applications subject to examination under the first inventor to file provisions of the AIA as explained in MPEP § 2159. See MPEP §§ 706.02(I)(1) - 706.02(I)(3) for applications not subject to examination under the first inventor to file provisions of the AIA. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO Internet website contains terminal disclaimer forms which may be used. Please visit www.uspto.gov/patent/patents-forms. The filing date of the application in which the form is filed determines what form (e.g., PTO/SB/25, PTO/SB/26, PTO/AIA/25, or PTO/AIA/26) should be used. A web-based eTerminal Disclaimer may be filled out completely online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-processed and approved immediately upon submission. For more information about eTerminal Disclaimers, refer to www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp.

Claim Rejections - 35 USC § 112

Claims 3-7, 19 and 20 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

Claim 3 recites a “dedicated control and/or dedicated displays for each of the first, second, third, and fourth food holding **bays**” (Exr’s emphasis), which is indefinite because claim 1, from which it depends, recites independent control only of “food holding zones,” not “bays.” Each zone comprises two bays held at the same zone temperature; hence control or display means for each bay would evidently be redundant.

In each of claims 19 and 20, “the ledge” lacks an antecedent basis. It evidently should instead read “the shelf.”

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

Claim(s) 1-3, 6-9, 12, 14-16, 22, 23, and 25 are rejected under 35 U.S.C. 102(a)(1) as anticipated by US PGPub. 2011/0114618.

Referring to Figures 1, 2, and 10 especially, ‘618 discloses “a multi-zone food holding bin” as claimed, including “a first food holding compartment” (topmost in Figs. 1 & 2) comprising “first” and “second side” panels 18, 20 and “a shelf” 21 (see paragraph 16), a “thermally conductive” “planar... top surface of the shelf” (par. 20), “a first food holding zone” 21A (Fig. 2 & par. 22) in the “first food holding compartment” with an “independently controllable first... and second heating element[s] disposed

[respectively at] top... and... bottom portion[s] of the first food holding compartment,” as recited in claim 1. Also as recited in claim 1, each “food holding zone” A, B, or C of each shelf 21 is capable of receiving two appropriately sized food trays; hence the “first food holding zone” has “a first food holding bay and a second food holding bay, each... configured to receive a food holding tray,” and an adjacent “second food holding zone [21 B] in the first food holding compartment [23] has third... and fourth food holding bays.” Note that the radiant heaters 50 shown mounted to shelves 21 in Fig. 10, when implemented in the multi-compartment food holding bin of Figs. 1 and 2, in independently controlled zones, heat radiantly from above and conductively from below, ***as recited in claims 12, 16, and 22.***

Thus are first and second heating elements respectively above and below the first food holding zone, third and fourth heating elements respectively above and below the second food holding zone.

As recited in claim 2, ‘610 discloses “a second food holding compartment disposed below the first,” with the second and fourth heating elements in the shelf between them, respectively heating from below the first and second food holding zones.

As in claims 3 and 6-9, ‘618 discloses opposing front and rear “bezels” 26 that “define” front and rear openings to the food holding compartments 23, the bezels (or “escutcheons”) serving as dedicated displays of temperature and additional food item information (pars. 17, 18 & 48).

As in claims 14 and 15, the shelf planar surface is continuous and undivided (par. 20).

As in claim 23, the shelf planar surface is aluminum (par. 21).

And as in claim 25, the first and second food holding zones can be “heated to different temperatures” (par. 22).

Claim Rejections - 35 USC § 103

Claims 13 and 24 are rejected under 35 U.S.C. 103 as being unpatentable over ‘618.

While ‘618 is silent about specific heating element structure, it would have been obvious to utilize a resistive wire, as recited in claim 13, since this is a well known conventional heating element

material, commended by its cost and versatility, being suitable for both radiant and conductive heating (convective as well). And it would have been obvious to rest a food holding tray, as in claim 24, on the shelf surface of '618, since food placed on a staging or holding bin is routinely kept in a tray.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH MOORE PELHAM whose telephone number is (571)272-4786. The examiner can normally be reached on M-F 8a-4p campus; 7-9p tele.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ibrahime Abraham can be reached on 5712705669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOSEPH M PELHAM/
Primary Examiner, Art Unit 3761
6/23/19

<i>Notice of References Cited</i>	Application/Control No. 16/403,349		Applicant(s)/Patent Under Reexamination Kestner et al.	
	Examiner JOSEPH M PELHAM		Art Unit 3761	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20110114618-A1	05-2011	CHUNG; TERRY TAE-IL	A47J39/006	219/201
	B					
	C					
	D					
	E					
	F					
	G					
	H					
	I					
	J					
	K					
	L					
	M					

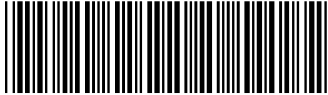
FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

<i>Search Notes</i> 	Application/Control No. 16/403,349	Applicant(s)/Patent Under Reexamination Kestner et al.
	Examiner JOSEPH M PELHAM	Art Unit 3761

CPC - Searched*		
Symbol	Date	Examiner
See attached search history	06/23/2019	JP

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
See attached search history	06/22/2019	JP
Inventor name search	06/22/2019	JP

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

--	--

<i>Index of Claims</i> 	Application/Control No. 16/403,349	Applicant(s)/Patent Under Reexamination Kestner et al.
	Examiner JOSEPH M PELHAM	Art Unit 3761

✓	Rejected
=	Allowed

-	Cancelled
÷	Restricted

N	Non-Elected
I	Interference

A	Appeal
O	Objected

CLAIMS									
☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47									
CLAIM		DATE							
Final	Original	06/23/2019							
	1	✓							
	2	✓							
	3	✓							
	4	✓							
	5	✓							
	6	✓							
	7	✓							
	8	✓							
	9	✓							
	10	✓							
	11	✓							
	12	✓							
	13	✓							
	14	✓							
	15	✓							
	16	✓							
	17	✓							
	18	✓							
	19	✓							
	20	✓							
	21	✓							
	22	✓							
	23	✓							
	24	✓							
	25	✓							
	26	✓							
	27	✓							

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Kyle Thomas Kestner
				Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	1	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-2,386,919	10-16-1945	Tobey	
	**	US-2,900,806	08-25-1959	Wurtz et al.	
	**	US-2,934,913	05-03-1960	Haines et al.	
	**	US-3,042,384	07-03-1962	Bauman	
	**	US-3,275,393	09-27-1966	Stentz et al.	
	**	US-3,301,618	01-31-1967	Feldser et al.	
	**	US-3,308,633	03-14-1967	Kritzer, Jr.	
	**	US-3,393,630	07-23-1968	Pickens	
	**	US-3,414,709	12-03-1968	Tricault	
	**	US-3,696,720	10-10-1972	Vinson	
	**	US-3,950,632	04-13-1976	Rivelli	
	**	US-3,979,056	09-07-1976	Barnes	
	**	US-4,036,995	07-19-1977	Koether et al.	
	**	US-4,077,690	03-07-1978	Koether	
	**	US-4,093,041	06-06-1978	Davis et al.	
	**	US-4,278,872	07-14-1981	Koether et al.	
	**	US-4,306,616	12-22-1981	Woods, Jr. et al.	
	**	US-4,355,521	10-26-1982	Tsai	
	**	US-4,388,689	06-14-1983	Hayman et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
	**	JP-10079088	03-24-1998	Toshiba Eng. Co. Ltd.		
	**	JP-11342061	12-14-1999	Shinwa Denshi Device Hanbai KK and NT Corporation:KK		
	**	JP-8000414	01-09-1996	Yamatake Honeywell Co. Ltd.		
	**	WO-01/31533-A1	05-03-2001	Salerno, Mark		
	**	WO-2005/034633-A1	04-21-2005	Duke Mfg Co		
	**					

Examiner Signature	/JOSEPH M PELHAM/	Date Considered	06/23/2019
--------------------	-------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.M.P/

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Kyle Thomas Kestner
				Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	2	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-4,530,067	07-16-1985	Dorr	
	**	US-4,569,421	02-11-1986	Sandstedt	
	**	US-4,610,238	09-09-1986	Veth	
	**	US-4,633,230	12-30-1986	Tam	
	**	US-4,644,931	02-24-1987	Veth	
	**	US-4,688,475	08-25-1987	Witt et al.	
	**	US-4,740,888	04-26-1988	Ceste, Sr. et al.	
	**	US-4,742,455	05-03-1988	Schreyer	
	**	US-4,782,445	11-01-1988	Pasquini	
	**	US-4,812,625	03-14-1989	Ceste, Sr.	
	**	US-4,812,963	03-14-1989	Albrecht et al.	
	**	US-4,864,498	09-05-1989	Pasquini et al.	
	**	US-4,911,068	03-27-1990	Koether et al.	
	**	US-4,922,435	05-01-1990	Cahlander et al.	
	**	US-5,003,472	03-26-1991	Perrill et al.	
	**	US-5,069,273	12-03-1991	O'Hearne	
	**	US-5,093,556	03-03-1992	Oelfke	
	**	US-5,128,862	07-07-1992	Mueller	
	**	US-5,132,914	07-21-1992	Cahlander et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature	/JOSEPH M PELHAM/	Date Considered	06/23/2019
-----------------------	-------------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.M.P/

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Kyle Thomas Kestner
				Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	3	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-5,172,328	12-15-1992	Cahlander et al.	
	**	US-5,188,020	02-23-1993	Buchnag	
	**	US-5,216,918	06-08-1993	Landis et al.	
	**	US-5,218,527	06-08-1993	Ishikawa et al.	
	**	US-5,247,807	09-28-1993	Jarman et al.	
	**	US-5,253,564	10-19-1993	Rosenbrock et al.	
	**	US-5,357,426	10-18-1994	Morita et al.	
	**	US-5,485,780	01-23-1996	Koether et al.	
	**	US-5,504,589	04-02-1996	Montague et al.	
	**	US-5,510,979	04-23-1996	Moderi et al.	
	**	US-5,539,671	07-23-1996	Albrecht et al.	
	**	US-5,553,312	09-03-1996	Gathey et al.	
	**	US-5,579,952	12-03-1996	Fiedler et al.	
	**	US-5,590,586	01-07-1997	Ulfig et al.	
	**	US-5,594,222	01-14-1997	Caldwell	
	**	US-5,616,269	04-01-1997	Fowler et al.	
	**	US-5,653,906	08-05-1997	Fowler et al.	
	**	US-5,724,886	03-10-1998	Ewald et al.	
	**	US-5,772,072	06-30-1998	Prescott et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature	/JOSEPH M PELHAM/	Date Considered	06/23/2019
--------------------	-------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.M.P/

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>			Complete if Known		
			Application Number	Not Yet Assigned	
			Filing Date	Concurrently Herewith	
			First Named Inventor	Kyle Thomas Kestner	
			Art Unit	Not Yet Assigned	
			Examiner Name	Not Yet Assigned	
Sheet	4	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-5,783,803	07-21-1998	Robards, Jr.	
	**	US-5,812,393	09-22-1998	Drucker	
	**	US-5,900,173	05-04-1999	Robards, Jr.	
	**	US-5,921,096	07-13-1999	Warren	
	**	US-5,931,083	08-03-1999	Stanger et al.	
	**	US-5,939,974	08-17-1999	Heagle et al.	
	**	US-5,944,324	08-31-1999	Schultheis et al.	
	**	US-5,947,012	09-07-1999	Ewald et al.	
	**	US-6,000,622	12-14-1999	Tonner et al.	
	**	US-6,006,996	12-28-1999	Bhatnagar	
	**	US-6,011,243	01-04-2000	Arnold et al.	
	**	US-6,026,372	02-15-2000	Savage	
	**	US-6,031,208	02-29-2000	Witt et al.	
	**	US-6,052,667	04-18-2000	Walker et al.	
	**	US-6,088,681	07-11-2000	Coleman et al.	
	**	US-6,114,659	09-05-2000	Finck et al.	
	**	US-6,116,154	09-12-2000	Vaselloff	
	**	US-6,119,587	09-19-2000	Ewald et al.	
	**	US-6,153,244	11-28-2000	Stanger et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature	/JOSEPH M PELHAM/	Date Considered	06/23/2019
-----------------------	-------------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.M.P/

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Kyle Thomas Kestner
				Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	5	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-6,158,885	12-12-2000	Landis	
	**	US-6,175,099	01-16-2001	Shei et al.	
	**	US-6,200,944	03-13-2001	Dovey et al.	
	**	US-6,209,447	04-03-2001	Ewald et al.	
	**	US-6,257,010	07-10-2001	Shei et al.	
	**	US-6,261,621	07-17-2001	Stanger et al.	
	**	US-6,262,394	07-17-2001	Shei et al.	
	**	US-6,412,403	07-02-2002	Veltrop	
	**	US-6,434,961	08-20-2002	Richmond et al.	
	**	US-6,502,411	01-07-2003	Okamoto	
	**	US-6,541,739	04-01-2003	Shei et al.	
	**	US-6,637,322	10-28-2003	Veltrop	
	**	US-6,658,994-B1	12-09-2003	McMillan	
	**	US-6,825,447	11-30-2004	Kim et al.	
	**	US-6,834,276	12-21-2004	Jensen et al.	
	**	US-6,878,391	04-12-2005	Veltrop	
	**	US-6,884,451	04-26-2005	Veltrop	
	**	US-7,028,498	04-18-2006	Monroe et al.	
	**	US-7,105,779	09-12-2006	Shei	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature	/JOSEPH M PELHAM/	Date Considered	06/23/2019
-----------------------	-------------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.M.P/

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>			Complete if Known		
			Application Number	Not Yet Assigned	
			Filing Date	Concurrently Herewith	
			First Named Inventor	Kyle Thomas Kestner	
			Art Unit	Not Yet Assigned	
			Examiner Name	Not Yet Assigned	
Sheet	6	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-7,132,926	11-07-2006	Vaselloff et al.	
	**	US-7,227,102	06-05-2007	Shei	
	**	US-7,235,762	06-26-2007	Gagas et al.	
	**	US-7,238,654	07-03-2007	Hodge et al.	
	**	US-7,258,064	08-21-2007	Vaselloff et al.	
	**	US-7,279,659	10-09-2007	Gagas et al.	
	**	US-7,328,654	02-12-2008	Shei	
	**	US-7,376,485	05-20-2008	Salerno	
	**	US-7,381,927	06-03-2008	Agnello	
	**	US-7,385,160	06-10-2008	Jones	
	**	US-7,446,282	11-04-2008	Shei et al.	
	**	US-7,628,107	12-08-2009	Vaselloff et al.	
	**	US-7,762,636	07-27-2010	Veesser et al.	
	**	US-7,858,906	12-28-2010	Veltrop et al.	
	**	US-7,905,173	03-15-2011	Sus et al.	
	**	US-7,971,523	07-05-2011	Hartfelder et al.	
	**	US-8,091,472	01-10-2012	Maciejewski et al.	
	**	US-8,096,231	01-17-2012	Veltrop et al.	
	**	US-8,134,101	03-13-2012	Majchrzak	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature	/JOSEPH M PELHAM/	Date Considered	06/23/2019
-----------------------	-------------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.M.P/

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Kyle Thomas Kestner
				Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	7	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-8,247,745	08-21-2012	Chung et al.	
	**	US-8,404,292	03-26-2013	Veltrop et al.	
	**	US-8,522,675	09-03-2013	Veltrop	
	**	US-8,558,142	10-15-2013	Theodos et al.	
	**	US-8,667,807	03-11-2014	Veltrop	
	**	US-8,997,636	04-07-2015	Kirby et al.	
	**	US-9,003,820	04-14-2015	Veltrop	
	**	US-9,068,768	06-30-2015	Veltrop	
	**	US-9,140,484	09-22-2015	Veltrop	
	**	US-9,140,485	09-22-2015	Veltrop	
	**	US-D063818	01-22-1924	Curtiss	
	**	US-D243362	02-08-1977	Shumrak et al.	
	**	US-D341054	11-09-1993	Maputol	
	**	US-D364530	11-28-1995	Robards, Jr. et al.	
	**	US-D369269	04-30-1996	Labadia Del Fresno	
	**	US-D427008	06-27-2000	Wasner	
	**	US-D427479	07-04-2000	Wasner	
	**	US-D434265	11-28-2000	Tatlow	
	**	US-D480260	10-07-2003	Domi et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature	/JOSEPH M PELHAM/	Date Considered	06/23/2019
-----------------------	-------------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.M.P/

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>			Complete if Known		
			Application Number	Not Yet Assigned	
			Filing Date	Concurrently Herewith	
			First Named Inventor	Kyle Thomas Kestner	
			Art Unit	Not Yet Assigned	
			Examiner Name	Not Yet Assigned	
Sheet	8	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-D570715	06-10-2008	Di Federico	
	**	US-D704982	05-20-2014	Gates	
	**	US-D716095	10-28-2014	Veltrop et al.	
	**	US-RE40151	03-18-2008	Shei et al.	
	**	US-RE40290	05-06-2008	Shei et al.	
	**	US-2001/0007322	07-12-2001	Shei et al.	
	**	US-2001/0053963	12-20-2001	Kim et al.	
	**	US-2003/0118706-A1	06-26-2003	Veltrop	
	**	US-20040000162	01-01-2004	Song	
	**	US-2004/0016242	01-29-2004	Song et al.	
	**	US-2004/0019534	01-29-2004	Callahan et al.	
	**	US-2004/0020915	02-05-2004	Shei	
	**	US-2004/0060320	04-01-2004	Roh et al.	
	**	US-2005/0211696-A1	09-29-2005	Adamski	
	**	US-20050236947	10-27-2005	LeClear et al.	
	**	US-2006/0150662	07-13-2006	Lee et al.	
	**	US-2006/0185527-A1	08-24-2006	Shei	
	**	US-20070017245	01-25-2007	Song et al.	
	**	US-20070144202	06-28-2007	Theodos et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature	/JOSEPH M PELHAM/	Date Considered	06/23/2019
-----------------------	-------------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.M.P/

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>			Complete if Known		
			Application Number	Not Yet Assigned	
			Filing Date	Concurrently Herewith	
			First Named Inventor	Kyle Thomas Kestner	
			Art Unit	Not Yet Assigned	
			Examiner Name	Not Yet Assigned	
Sheet	9	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-20070251397	11-01-2007	Dorsten et al.	
	**	US-2008/0023462-A1	01-31-2008	Shei et al.	
	**	US-20080213449	09-04-2008	Wisner et al.	
	**	US-2008/0302778	12-11-2008	Veltrop et al.	
	**	US-2009/0045185	02-19-2009	Schroeder et al.	
	**	US-2009/0126580-A1	05-21-2009	Hartfelder et al.	
	**	US-2009/0199723-A1	08-13-2009	Veltrop et al.	
	**	US-2009/0199725-A1	08-13-2009	Veltrop et al.	
	**	US-2009/0266244-A1	10-29-2009	Maciejewski et al.	
	**	US-20090309027	12-17-2009	Von Striver	
	**	US-20100205992	08-19-2010	Morris	
	**	US-2011/0030565	02-10-2011	Shei	
	**	US-2011/0252813-A1	10-20-2011	Veltrop	
	**	US-2011/0253698-A1	10-20-2011	Theodos et al.	
	**	US-2011/0253703-A1	10-20-2011	THEODOS et al.	
	**	US-2011/0278278-A1	11-17-2011	Emerich et al.	
	**	US-2011/0283895-A1	11-24-2011	Veltrop	
	**	US-2012/0079699	04-05-2012	Veltrop et al.	
	**	US-2012/0261426-A1	10-18-2012	Tomczyk et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature	/JOSEPH M PELHAM/	Date Considered	06/23/2019
-----------------------	-------------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.M.P/

Substitute for form 1449/PTO			Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>			Application Number	Not Yet Assigned	
			Filing Date	Concurrently Herewith	
			First Named Inventor	Kyle Thomas Kestner	
			Art Unit	Not Yet Assigned	
			Examiner Name	Not Yet Assigned	
Sheet	10	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-2012/0285942	11-15-2012	Godecker et al.	
	**	US-2013/0175253-A1	07-11-2013	Shei et al.	
	**	US-2014/0010937-A1	01-09-2014	Stanger	
	**	US-2014/0057031-A1	02-27-2014	Ewald et al.	
	**	US-2014/0083309-A1	03-27-2014	Reese et al.	
	**	US-2014/0130684-A1	05-15-2014	Reese et al.	
	**	US-2014/0150461	06-05-2014	Veltrop	
	**	US-2014/0165644	06-19-2014	Veltrop	
	**	US-2014/0174101	06-26-2014	Veltrop	
	**	US-2014/0197177	07-17-2014	Veltrop et al.	
	**	US-2014/0246966-A1	09-04-2014	Nevarez	
	**	US-2014/0263269-A1	09-18-2014	Veltrop et al.	
	**	US-2015/0201749-A1	07-23-2015	Turner et al.	
	**	US-2015/0201803-A1	07-23-2015	Veltrop	
		US-8,607,587	12-17-2013	Veltrop	
		US-9,854,943	01-02-2018	Betzold et al.	
		US-D725429	03-31-2015	Veltrop et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature	/JOSEPH M PELHAM/	Date Considered	06/23/2019
--------------------	-------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.M.P/

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Kyle Thomas Kestner
				Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	11	of	11	Attorney Docket Number	29178/50736CON1

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	**	"Modular Holding Cabinets", Product Catalog, Carter-Hoffmann, Mundelein, Illinois (January 2014).	
	**	Frymaster HCP Installation and Operation Manual, December 2006, pages 1-1 to 10-4, title page and table of publisher, Enodis, Frymaster LLC, Shreveport, LA.	
	**	Prince Castle LLC, Holding Bins (www.princecastle.com < http://www.princecastle.com >).	
	**	Prince Castle LLC, Holding Panels (www.princecastle.com < http://www.princecastle.com >).	
	**	Reider, "How to Say What Stuff Looks Like, Ontario, Canada: Marcus Books, p.62 (1995).	
	**	Thermodyne Food Products, Inc., Counter Top Holding Oven Model 300 NDNL specification.	

Examiner Signature	/JOSEPH M PELHAM/	Date Considered	06/23/2019
-----------------------	-------------------	--------------------	------------

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

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.M.P/

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	"20110114618".pn. and (heater heating element)	US-PGPUB; USPAT; USOCR	OR	ON	2019/06/22 21:14
L2	1	"20110114618".pn. and (heater heating element (display with temperature))	US-PGPUB; USPAT; USOCR	OR	ON	2019/06/22 21:57
L3	1	"20110114618".pn. and (wire resistor resistive)	US-PGPUB; USPAT; USOCR	OR	ON	2019/06/22 22:05
L4	0	"20110114618".pn. and (IR infrared)	US-PGPUB; USPAT; USOCR	OR	ON	2019/06/22 22:33
L5	0	"20110114618".pn. and (radiant\$2)	US-PGPUB; USPAT; USOCR	OR	ON	2019/06/22 22:34
L6	0	"20110114618".pn. and (gap space spaced spacing)	US-PGPUB; USPAT; USOCR	OR	ON	2019/06/22 23:32
L7	0	"20110114618".pn. and (latch)	US-PGPUB; USPAT; USOCR	OR	ON	2019/06/23 00:04
L8	30	(CA-1235519-\$ CA-1246235-\$ CN-104322015-\$ CN-107951334-\$ EP-3140791-\$ EP-3200665-\$ EP-3311715-\$ EP-3311716-\$ EP-3312729-\$ WO-1996007298-\$ WO-2008032225-\$ WO-2015171630-\$ WO-2016053932-\$).DID.	FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/23 00:05
S1	20	shei-\$ in. and 219/398-428.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2016/09/28 16:02
S2	20	219/398,394,428.ccls. and zone and (tray bay)	US-PGPUB; USPAT; USOCR	OR	ON	2016/09/29 15:54
S3	61	("20020094361" "20020100756" "20020102337" "20020172742" "20030080657" "20030118706" "20030188929" "20040033297" "20040208961" "20050255208" "20060045943" "2122532" "3136356" "3331425" "3542445" "3942426"	US-PGPUB; USPAT; USOCR	OR	ON	2016/09/29 16:01

		"4095642" "4109484" "4165778" "4180125" "4186790" "4254824" "4296792" "4312396" "4313485" "4384606" "4388961" "4392360" "4607678" "4784054" "4801180" "4822981" "5127460" "5172328" "5724886" "5783803" "5852967" "5900173" "5931083" "5947012" "6119587" "6175099" "6209447" "6262394" "6358548" "6412403" "6541739" "6607766" "6637322" "6658992" "6658994" "6783199" "6878391" "6884451").PN. OR ("7905173").URPN.				
S4	35	("20010007322" "20030118706" "20040020915" "20040056761" "20040069155" "20050216349" "4575164" "4576425" "4832422" "5058764" "5724886" "5783803" "5900173" "5947012" "6116154" "6119587" "6175099" "6262394" "6412403" "6637322" "6878391" "6884451" "7105779" "D254308" "D364530").PN. OR ("7385160").URPN.	US- PGPUB; USPAT; USOCR	OR	ON	2016/09/29 16:02
S5	8	(US-20140130684-\$ or US-20130175253-\$ or US-20110030565-\$).did. or (US- 8895902-\$ or US-7328654-\$ or US- 7105779-\$ or US-7905173-\$ or US- 7385160-\$).did.	US- PGPUB; USPAT	OR	ON	2016/09/29 20:54
S6	1	("7385160").pn. and zone and (tray bay)	US- PGPUB; USPAT; USOCR	OR	ON	2016/09/30 13:41
S7	1	("7905173").pn. and zone and ("33"\$1 "31"\$1)	US- PGPUB; USPAT; USOCR	OR	ON	2016/09/30 14:53
S8	1	("7905173").pn. and zone and (back rear behind)	US- PGPUB; USPAT; USOCR	OR	ON	2016/09/30 15:03
S9	1	("7905173").pn. and zone and (upper lower)	US- PGPUB; USPAT; USOCR	OR	ON	2016/09/30 15:39
S10	0	("7905173").pn. and zone and (lid)	US- PGPUB; USPAT; USOCR	OR	ON	2016/09/30 15:44
S11	1	("7905173").pn. and zone and (cover)	US- PGPUB; USPAT; USOCR	OR	ON	2016/09/30 15:44
S12	0	("7905173").pn. and (wire coil)	US- PGPUB; USPAT; USOCR	OR	ON	2016/09/30 15:46
S13	2	("5842353" "6403928").PN.	US- PGPUB; USPAT;	OR	ON	2016/09/30 16:07

			USOCR			
S14	1	("7385160").pn. and (heat\$3 near7 (upper top lower bottom))	US-PGPUB; USPAT; USOCR	OR	ON	2016/09/30 21:25
S15	1	("7385160" "7905173").pn. and (heat\$3 with (coil wire cable resistor resistive))	US-PGPUB; USPAT; USOCR	OR	ON	2016/09/30 21:56
S16	16	219/398,394,428.ccls. and ((tray bay) with (latch stop stay block))	US-PGPUB; USPAT; USOCR	OR	ON	2016/09/30 22:21
S17	135	(312/236 219/214,385,386,398,394,428).ccls. and ((tray bay) with (latch stop stay block apice lock))	US-PGPUB; USPAT; USOCR	OR	ON	2016/09/30 22:27
S18	119	S17 not S16	US-PGPUB; USPAT; USOCR	OR	ON	2016/09/30 22:27
S19	15	(US-20140130684-\$ or US-20130175253-\$ or US-20110030565-\$ or US-20010007322-\$ or US-20080302778-\$).did. or (US-8895902-\$ or US-7328654-\$ or US-7105779-\$ or US-7905173-\$ or US-7385160-\$ or US-6262394-\$ or US-8096231-\$ or US-8404292-\$ or US-8522675-\$ or US-5783803-\$).did.	US-PGPUB; USPAT	OR	ON	2016/09/30 22:59
S20	1	S19 and lock\$3	US-PGPUB; USPAT; USOCR	OR	ON	2016/09/30 23:00
S21	2	("8522675" "7905173" "7385160").pn. and ((heat\$3 control\$4) with (independent independently))	US-PGPUB; USPAT; USOCR	OR	ON	2016/10/01 15:10
S22	2	("8522675" "7905173" "7385160").pn. and ((heat\$3 control\$4) and (independent independently))	US-PGPUB; USPAT; USOCR	OR	ON	2016/10/01 15:14
S23	2	("8522675" "7905173" "7385160").pn. and ((heat heater heating control\$4) and (independent independently))	US-PGPUB; USPAT; USOCR	OR	ON	2016/10/01 15:16
S24	1	("8522675" "7905173" "7385160").pn. and ((tray) with (cover lid))	US-PGPUB; USPAT; USOCR	OR	ON	2016/10/01 15:29
S25	1	"20010007322".pn. and (heater heating resistive resistor)	US-PGPUB; USPAT; USOCR	OR	ON	2016/10/01 15:40
S26	1	"7905173".pn. and (zone)	US-PGPUB; USPAT; USOCR	OR	ON	2016/10/01 17:08
S27	17	219/\$.ccls. and ((roller adj coaster) (amusement adj park))	US-PGPUB;	OR	ON	2016/10/01 18:08

			USPAT; USOCR			
S28	1	"7905173".pn. and curb	US- PGPUB; USPAT; USOCR	OR	ON	2017/04/14 21:05
S29	1	"8522675".pn. and power	US- PGPUB; USPAT; USOCR	OR	ON	2017/04/14 21:48
S30	1	"8522675".pn. and open	US- PGPUB; USPAT; USOCR	OR	ON	2017/04/14 21:56
S31	1	"8522675".pn. and wire	US- PGPUB; USPAT; USOCR	OR	ON	2017/04/14 22:06
S32	0	"7385160".pn. and ((upper adj heater) with (setting power))	US- PGPUB; USPAT; USOCR	OR	ON	2017/04/14 22:22
S33	0	"7385160".pn. and ((upper adj heater) same (setting power))	US- PGPUB; USPAT; USOCR	OR	ON	2017/04/14 22:22
S34	1	"7385160".pn. and (upper adj heater)	US- PGPUB; USPAT; USOCR	OR	ON	2017/04/14 22:22
S35	28	(US-10079088-\$ US-11342061-\$ US- 2386919-\$ US-2900806-\$ US-2934913- \$ US-3042384-\$ US-3275393-\$ US- 3301618-\$ US-3308633-\$ US-3414709- \$ US-3696720-\$ US-3950632-\$ US- 3979056-\$ US-4036995-\$ US-4077690- \$ US-4278872-\$ US-4306616-\$ US- 4355521-\$ US-4388689-\$ US-4530067- \$ US-4569421-\$ US-8000414-\$).DID.	US- PGPUB; USPAT; USOCR	OR	ON	2017/04/14 22:31
S36	19	(US-4610238-\$ US-4633230-\$ US- 4644931-\$ US-4688475-\$ US-4740888- \$ US-4742455-\$ US-4782445-\$ US- 4812625-\$ US-4812963-\$ US-4864498- \$ US-4911068-\$ US-4922435-\$ US- 5003472-\$ US-5069273-\$ US-5093556- \$ US-5128862-\$ US-5132914-\$ US- 5172328-\$ US-5188020-\$).DID.	US- PGPUB; USPAT; USOCR	OR	ON	2017/04/14 22:33
S37	19	(US-5921096-\$ US-5931083-\$ US- 5939974-\$ US-5944324-\$ US-5947012- \$ US-6000622-\$ US-6006996-\$ US- 6011243-\$ US-6026372-\$ US-6031208- \$ US-6052667-\$ US-6088681-\$ US- 6114659-\$ US-6116154-\$ US-6119587- \$ US-6153244-\$ US-6158885-\$ US- 6175099-\$ US-6200944-\$).DID.	US- PGPUB; USPAT; USOCR	OR	ON	2017/04/14 22:33
S38	19	(US-6209447-\$ US-6257010-\$ US- 6261621-\$ US-6262394-\$ US-6412403- \$ US-6434961-\$ US-6502411-\$ US- 6541739-\$ US-6637322-\$ US-6658994- \$ US-6825447-\$ US-6834276-\$ US-	US- PGPUB; USPAT; USOCR	OR	ON	2017/04/14 22:34

		6878391-\$ US-6884451-\$ US-7028498-\$ US-7132926-\$ US-7227102-\$ US-7235762-\$ US-7238654-\$).DID.				
S39	20	(US-7258064-\$ US-7279659-\$ US-7376485-\$ US-7381927-\$ US-7446282-\$ US-7628107-\$ US-7762636-\$ US-7858906-\$ US-8091472-\$ US-8247745-\$ US-9003820-\$ US-D063818-\$ US-D243362-\$ US-D341054-\$ US-D364530-\$ US-D369269-\$ US-D427008-\$ US-D427479-\$ US-D434265-\$).DID.	US-PGPUB; USPAT; USOCR	OR	ON	2017/04/14 22:35
S40	51	(US-0000162-\$ US-0016242-\$ US-0017245-\$ US-0019534-\$ US-0020915-\$ US-0023462-\$ US-0045185-\$ US-0053963-\$ US-0060320-\$ US-0118706-\$ US-0144202-\$ US-0150662-\$ US-0211696-\$ US-0213449-\$ US-0236947-\$ US-0251397-\$ US-D570715-\$ US-RE40151-\$ US-RE40290-\$ US-20010053963-\$ US-20030118706-\$ US-20040000162-\$ US-20040016242-\$ US-20040019534-\$ US-20040020915-\$ US-20040060320-\$ US-20050211696-\$ US-20050236947-\$ US-20060150662-\$ US-20070017245-\$ US-20070144202-\$ US-20070251397-\$ US-20080023462-\$ US-20080213449-\$ US-20090045185-\$).DID.	US-PGPUB; USPAT; USOCR	OR	ON	2017/04/14 22:36
S41	36	(US-0079699-\$ US-0150461-\$ US-0165644-\$ US-0174101-\$ US-0197177-\$ US-0205992-\$ US-0253698-\$ US-0253703-\$ US-0263269-\$ US-0266244-\$ US-0285942-\$ US-0309027-\$ US-20090266244-\$ US-20090309027-\$ US-20100205992-\$ US-20110253698-\$ US-20110253703-\$ US-20120079699-\$ US-20120285942-\$ US-20140150461-\$ US-20140165644-\$ US-20140174101-\$ US-20140197177-\$ US-20140263269-\$).DID.	US-PGPUB; USPAT; USOCR	OR	ON	2017/04/14 22:37
S42	155	S35 S36 S37 S38 S39 S40 S41	US-PGPUB; USPAT	OR	ON	2017/04/14 22:39
S43	52	(312/236 219/214,385,386,398,394,428).ccls. and ((tray bay stage staging service bin holding) with (food meal)) and ((tray pan vessel dish chafer chafing) same (aluminum Al)) and ((heater heating warmer warming) near5 (individual individually independent independently))	US-PGPUB; USPAT; USOCR	OR	ON	2017/12/07 16:06
S44	124	(A47J36/\$ A47J39/\$ F24C15/\$).cpc. and ((tray bay stage staging service bin holding) with (food meal)) and ((tray pan vessel dish chafer chafing) same (aluminum Al)) and ((heater heating warmer warming) near5 (individual individually independent independently))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2017/12/07 17:19
S45	80	S44 not S43	US-PGPUB; USPAT;	OR	ON	2017/12/07 17:19

			USOCR; FPRS; EPO; JPO; DERWENT			
S46	175	((A47J36/\$ A47J39/\$ F24C15/\$).cpc. and ((tray bay stage staging service bin holding) with (food meal)) and ((bottom floor surface plate panel) same (aluminum Al)) and ((heater heating warmer warming) near5 (individual individually independent independently)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2017/12/07 17:24
S47	69	S46 not (S43 S44)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2017/12/07 17:24
S48	156	((A47J36/\$ A47J39/\$ F24C15/\$).cpc. and ((tray bay stage staging service bin holding) with (food meal)) and ((bottom floor surface plate panel) same (aluminum Al)) and ((heater heating warmer warming) near5 (individual individually independent independently))) and ((tray pan vessel dish chafer chafing) same food)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2017/12/07 17:26
S49	52	S48 not (S43 S44)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2017/12/07 17:26
S52	7	((US-20110252813-\$ or US-20110283895-\$ or US-20110114624-\$ or US-20080023462-\$ or US-20040069155-\$ or US-20020172742-\$).did. or (US-6412403-\$).did.	US-PGPUB; USPAT; USOCR	OR	ON	2019/06/20 14:57
S53	0	("9976750").pn. and bezel.clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/20 15:25
S54	1	("9976750").pn. and latch.clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/20 15:27
S55	0	("9976750").pn. and display.clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/20 15:30
S56	1	("9976750").pn. and control\$4.clm.	US-	OR	ON	2019/06/20

			PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT			15:35
S57	0	("20110114624").pn. and (latch bezel)	US- PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/20 15:36
S58	1	("20110114624").pn. and (latch bezel)	US- PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/20 15:37
S59	1	("9976750").pn. and lid.clm.	US- PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/20 15:42
S60	1	("9976750").pn. and (more adj heat).clm.	US- PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/20 16:17
S61	1	("20180266696").pn. and (more adj heat).clm.	US- PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/20 16:18
S62	1	("20180266696").pn. and (bezel with forward)	US- PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/21 11:31
S63	1	("9976750").pn. and tray.clm.	US- PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/21 21:01
S64	0	("9976750").pn. and (fourth adj3 zone).clm.	US- PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2019/06/21 21:16

			DERWENT			
S65	1	("9976750").pn. and (fourth).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/21 21:16
S66	0	("20180270906").pn. and (bay).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/21 21:39
S67	1	("9976750").pn. and (bay).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/21 23:47
S68	193	((A47J36/\$ A47J39/\$ F24C15/\$).cpc. and ((bay stage staging display service bin holding holder dispensing dispenser) near3 (food meal)) and (bottom floor surface plate panel) and ((heater heating warmer warming) near5 (individual individually independent independently)) and ((tray bay stage staging display service bin holding holder dispensing dispenser) near3 (tray pan vessel dish chafer chafing))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/22 00:38
S69	177	((A47J36/\$ A47J39/\$ F24C15/\$).cpc. and ((tray bay stage staging service bin holding) with (food meal)) and ((bottom floor surface plate panel) same (aluminum Al)) and ((heater heating warmer warming) near5 (individual individually independent independently)) and ((tray pan vessel dish chafer chafing) same food)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/22 00:54
S70	89	S68 not S69	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/22 00:54
S71	153	S68 and @pd< "20160401"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/22 00:55
S72	73	S71 not S69	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2019/06/22 00:56

			DERWENT			
S73	92	((A47J36/\$ A47J39/\$ F24C15/\$).cpc. and ((bay stage staging display service bin holding holder dispensing dispenser) near3 (food meal)) and (bottom floor surface plate panel) and ((heater heating warmer warming) near5 (individual individually independent independently)) and ((tray bay stage staging display service bin holding holder dispensing dispenser) near3 (tray pan vessel dish chafer chafing)) and ((lid cover) near5 (tray pan vessel dish chafer chafing))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/22 00:58
S74	77	S73 and @pd< "20160401"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/22 00:59
S75	88	((A47J36/\$ A47J39/\$ F24C15/\$).cpc. and ((bay stage staging display service bin holding holder dispensing dispenser) near3 (food meal)) and (bottom floor surface plate panel) and ((heater heating) near5 (individual individually independent independently)) and ((tray bay stage staging display service bin holding holder dispensing dispenser) near3 (tray pan vessel dish chafer chafing)) and ((lid cover) near5 (tray pan vessel dish chafer chafing))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/22 01:04
S76	73	S75 and @pd< "20160401"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2019/06/22 01:05
S77	24	(US-20140130684-\$ or US-20130175253-\$ or US-20110030565-\$ or US-20040069155-\$ or US-20010007322-\$ or US-20090199725-\$ or US-20080302778-\$ or US-20110283895-\$ or US-20110253698-\$ or US-20110252813-\$ or US-20110114624-\$ or US-20080023462-\$ or US-20020172742-\$ or US-20100140251-\$).did. or (US-7328654-\$ or US-7105779-\$ or US-7905173-\$ or US-7385160-\$ or US-6262394-\$ or US-8096231-\$ or US-8404292-\$ or US-8522675-\$ or US-5783803-\$ or US-6412403-\$).did.	US-PGPUB; USPAT	OR	ON	2019/06/22 01:11
S78	19	(US-2386919-\$ US-2900806-\$ US-2934913-\$ US-3042384-\$ US-3275393-\$ US-3301618-\$ US-3308633-\$ US-3393630-\$ US-3414709-\$ US-3696720-\$ US-3950632-\$ US-3979056-\$ US-4036995-\$ US-4077690-\$ US-4093041-\$ US-4278872-\$ US-4306616-\$ US-4355521-\$ US-4388689-\$).DID.	US-PGPUB; USPAT	OR	ON	2019/06/22 01:13
S79	19	(US-4530067-\$ US-4569421-\$ US-	US-	OR	ON	2019/06/22

		4610238-\$ US-4633230-\$ US-4644931-\$ US-4688475-\$ US-4740888-\$ US-4742455-\$ US-4782445-\$ US-4812625-\$ US-4812963-\$ US-4864498-\$ US-4911068-\$ US-4922435-\$ US-5003472-\$ US-5069273-\$ US-5093556-\$ US-5128862-\$ US-5132914-\$).DID.	PGPUB; USPAT			01:14
S80	19	(US-5172328-\$ US-5188020-\$ US-5216918-\$ US-5218527-\$ US-5247807-\$ US-5253564-\$ US-5357426-\$ US-5485780-\$ US-5504589-\$ US-5510979-\$ US-5539671-\$ US-5553312-\$ US-5579952-\$ US-5590586-\$ US-5594222-\$ US-5616269-\$ US-5653906-\$ US-5724886-\$ US-5772072-\$).DID.	US- PGPUB; USPAT	OR	ON	2019/06/22 01:14
S81	19	(US-5783803-\$ US-5812393-\$ US-5900173-\$ US-5921096-\$ US-5931083-\$ US-5939974-\$ US-5944324-\$ US-5947012-\$ US-6000622-\$ US-6006996-\$ US-6011243-\$ US-6026372-\$ US-6031208-\$ US-6052667-\$ US-6088681-\$ US-6114659-\$ US-6116154-\$ US-6119587-\$ US-6153244-\$).DID.	US- PGPUB; USPAT	OR	ON	2019/06/22 01:15
S82	19	(US-6158885-\$ US-6175099-\$ US-6200944-\$ US-6209447-\$ US-6257010-\$ US-6261621-\$ US-6262394-\$ US-6412403-\$ US-6434961-\$ US-6502411-\$ US-6541739-\$ US-6637322-\$ US-6658994-\$ US-6825447-\$ US-6834276-\$ US-6878391-\$ US-6884451-\$ US-7028498-\$ US-7105779-\$).DID.	US- PGPUB; USPAT	OR	ON	2019/06/22 01:16
S83	19	(US-7132926-\$ US-7227102-\$ US-7235762-\$ US-7238654-\$ US-7258064-\$ US-7279659-\$ US-7328654-\$ US-7376485-\$ US-7381927-\$ US-7385160-\$ US-7446282-\$ US-7628107-\$ US-7762636-\$ US-7858906-\$ US-7905173-\$ US-7971523-\$ US-8091472-\$ US-8096231-\$ US-8134101-\$).DID.	US- PGPUB; USPAT	OR	ON	2019/06/22 01:17
S84	19	(US-8247745-\$ US-8404292-\$ US-8522675-\$ US-8558142-\$ US-8667807-\$ US-8997636-\$ US-9003820-\$ US-9068768-\$ US-9140484-\$ US-9140485-\$ US-D063818-\$ US-D243362-\$ US-D341054-\$ US-D364530-\$ US-D369269-\$ US-D427008-\$ US-D427479-\$ US-D434265-\$ US-D480260-\$).DID.	US- PGPUB; USPAT	OR	ON	2019/06/22 01:18
S85	29	(US-0007322-\$ US-0016242-\$ US-0019534-\$ US-0020915-\$ US-0053963-\$ US-0060320-\$ US-0118706-\$ US-0150662-\$ US-0185527-\$ US-0211696-\$ US-20010007322-\$ US-20010053963-\$ US-20030118706-\$ US-20040016242-\$ US-20040019534-\$ US-20040020915-\$ US-20040060320-\$ US-20040000162-\$ US-20050211696-\$ US-20050236947-\$ US-20060150662-\$ US-20060185527-\$ US-20070017245-\$ US-20070144202-\$ US-D570715-\$ US-D704982-\$ US-D716095-\$ US-RE40151-\$ US-RE40290-\$).DID.	US- PGPUB; USPAT	OR	ON	2019/06/22 01:19

S86	34	(US-0023462-\$ US-0030565-\$ US-0045185-\$ US-0079699-\$ US-0126580-\$ US-0199723-\$ US-0199725-\$ US-0252813-\$ US-0253698-\$ US-0253703-\$ US-0261426-\$ US-0266244-\$ US-0278278-\$ US-0283895-\$ US-0302778-\$ US-20070251397-\$ US-20080023462-\$ US-20080302778-\$ US-20080213449-\$ US-20090045185-\$ US-20090126580-\$ US-20090199723-\$ US-20090199725-\$ US-20090266244-\$ US-20090309027-\$ US-20100205992-\$ US-20110030565-\$ US-20110252813-\$ US-20110253698-\$ US-20110253703-\$ US-20110278278-\$ US-20110283895-\$ US-20120079699-\$ US-20120261426-\$).DID.	US-PGPUB; USPAT	OR	ON	2019/06/22 01:19
S87	28	(US-0010937-\$ US-0057031-\$ US-0083309-\$ US-0130684-\$ US-0150461-\$ US-0165644-\$ US-0174101-\$ US-0175253-\$ US-0197177-\$ US-0201749-\$ US-0201803-\$ US-0246966-\$ US-0263269-\$ US-0285942-\$ US-20120285942-\$ US-20130175253-\$ US-20140010937-\$ US-20140057031-\$ US-20140083309-\$ US-20140130684-\$ US-20140150461-\$ US-20140165644-\$ US-20140174101-\$ US-20140197177-\$ US-20140246966-\$ US-20140263269-\$ US-20150201749-\$ US-20150201803-\$).DID.	US-PGPUB; USPAT	OR	ON	2019/06/22 01:20
S88	228	S77 S78 S79 S80 S81 S82 S83 S84 S85 S86 S87	US-PGPUB; USPAT	OR	ON	2019/06/22 01:22
S89	57	S76 not S88	US-PGPUB; USPAT	OR	ON	2019/06/22 01:29
S90	0	S77 not S88	US-PGPUB; USPAT	OR	ON	2019/06/22 01:31
S91	1	("20110252813").did.	US-PGPUB; USPAT	OR	ON	2019/06/22 01:43
S92	0	S91 and zone	US-PGPUB; USPAT	OR	ON	2019/06/22 01:46
S93	1	S91 and (individual\$2 independent\$2)	US-PGPUB; USPAT	OR	ON	2019/06/22 01:47
S94	1	"9976750".pn. and bay.clm.	US-PGPUB; USPAT; USOCR	OR	ON	2019/06/22 14:14
S95	0	"9976750".pn. and bezel.clm.	US-PGPUB; USPAT; USOCR	OR	ON	2019/06/22 14:15
S96	0	"9976750".pn. and displayl.clm.	US-PGPUB; USPAT; USOCR	OR	ON	2019/06/22 14:19

S97	0	"9976750".pn. and display.clm.	US-PGPUB; USPAT; USOCR	OR	ON	2019/06/22 14:19
S98	1	"20110114624".pn. and "50"	US-PGPUB; USPAT; USOCR	OR	ON	2019/06/22 18:32
S99	1	"20110114624".pn. and (tray conductive\$2 radiant\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2019/06/22 18:51
S100	0	"20110114624".pn. and (lid latch)	US-PGPUB; USPAT; USOCR	OR	ON	2019/06/22 19:24
S101	29	(US-10034575-\$ US-10136762-\$ US- 10213052-\$ US-10271689-\$ US- 20070220907-\$ US-20080047287-\$ US- 20110114618-\$ US-20110114625-\$ US- 20110130887-\$ US-20110252813-\$ US- 20140150461-\$ US-20150201803-\$ US- 20150327726-\$ US-20160095468-\$ US- 20170065117-\$ US-20180103802-\$ US- 20180103803-\$ US-20180103804-\$ US- 20190090692-\$ US-5799822-\$ US- 5975348-\$ US-6011243-\$ US-6658994- \$ US-8140185-\$ US-9003820-\$ US- 9068768-\$ US-9854943-\$ US-9901213- \$ US-9962038-\$).DID.	US-PGPUB; USPAT; USOCR	OR	ON	2019/06/22 19:26
S102	1	"20110114618".pn. and (tray conductive\$2 radiant\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2019/06/22 19:49
S103	1	"20110114618".pn. and (tray conductive\$2 radiant\$3 "40")	US-PGPUB; USPAT; USOCR	OR	ON	2019/06/22 19:52
S104	1	"20110114618".pn. and (tray conductive\$2 radiant\$3 "40" "21" "50")	US-PGPUB; USPAT; USOCR	OR	ON	2019/06/22 19:55

EAST Search History (I nterference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S50	0	((tray bay stage staging service bin holding) with (food meal)) and ((tray pan vessel dish chafer chafing) same (aluminum Al)) and ((heater heating warmer warming) near5 (individual individually independent independently))).clm.	US-PGPUB	OR	ON	2017/12/07 17:22
S51	0	((tray bay stage staging service bin holding) with (food meal)) and ((bottom floor surface plate panel) same (aluminum Al)) and ((heater heating warmer warming) near5 (individual individually independent independently)) and ((tray pan vessel dish chafer chafing) same food)).clm.	US-PGPUB	OR	ON	2017/12/07 17:30

6/ 23/ 2019 12:50:21 AM

C:\ Users\ jpelham\ Documents\ EAST\ Workspaces\ 16.403349.wsp



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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/403,349	05/03/2019	Kyle Thomas Kestner	29178/50736CON1	6614
4743	7590	05/17/2019	EXAMINER	
MARSHALL, GERSTEIN & BORUN LLP 233 SOUTH WACKER DRIVE 6300 WILLIS TOWER CHICAGO, IL 60606-6357			ART UNIT	PAPER NUMBER
			3761	
			NOTIFICATION DATE	DELIVERY MODE
			05/17/2019	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):

mgbdoCKET@marshallip.com

<i>Decision Granting Request for Prioritized Examination (Track I)</i>	Application No. 16/403,349	Applicant(s) Kestner et al.	
	Examiner BRIAN W BROWN	Art Unit OPET	AIA (FITF) Status Yes
1. THE REQUEST FILED <u>03 May 2019</u> IS GRANTED . The above-identified application has met the requirements for prioritized examination A. ☒ for an original nonprovisional application (Track I). B. ☐ for an application undergoing continued examination (RCE). 2. The above-identified application will undergo prioritized examination. The application will be accorded special status throughout its entire course of prosecution until one of the following occurs: A. filing a <u>petition for extension of time</u> to extend the time period for filing a reply; B. filing an <u>amendment to amend the application to contain more than four independent claims, more than thirty total claims</u>, or a multiple dependent claim; C. filing a <u>request for continued examination</u> ; D. filing a notice of appeal; E. filing a request for suspension of action; F. mailing of a notice of allowance; G. mailing of a final Office action; H. completion of examination as defined in 37 CFR 41.102; or I. abandonment of the application. Telephone inquiries with regard to this decision should be directed to BRIAN BROWN at (571)272-5338. In his/her absence, calls may be directed to Petition Help Desk at (571) 272-3282.			
/BRIAN W BROWN/ Petitions Examiner, OPET			



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

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
16/403,349	05/03/2019	3761	2420	29178/50736CON1	27	1

CONFIRMATION NO. 6614

FILING RECEIPT



0000000108220796

4743

MARSHALL, GERSTEIN & BORUN LLP
233 SOUTH WACKER DRIVE
6300 WILLIS TOWER
CHICAGO, IL 60606-6357

Date Mailed: 05/17/2019

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)

Kyle Thomas Kestner, Schaumburg, IL;
Christopher B. Lyons JR., Lagrange, IL;
Charles B. Hartfelder, Hanover Park, IL;
Zachary N. McCoy, South Elgin, IL;

Applicant(s)

PRINCE CASTLE LLC, Carol Stream, IL;

Assignment For Published Patent Application

PRINCE CASTLE LLC, Carol Stream, IL

Power of Attorney: The patent practitioners associated with Customer Number 04743

Domestic Priority data as claimed by applicant

This application is a CON of 15/984,760 05/21/2018
which is a CON of 15/134,380 04/20/2016 PAT 9976750

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: 05/15/2019

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 16/403,349**

Projected Publication Date: Request for Non-Publication Acknowledged

Non-Publication Request: Yes

Early Publication Request: No

Title

MULTI-ZONE FOOD HOLDING BIN

Preliminary Class

099

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.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

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.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

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

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

SelectUSA

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop

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

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875						Application or Docket Number 16/403,349				
APPLICATION AS FILED - PART I										
(Column 1)		(Column 2)		SMALL ENTITY		OTHER THAN SMALL ENTITY				
FOR	NUMBER FILED	NUMBER EXTRA	RATE(\$)	FEE(\$)		RATE(\$)	FEE(\$)			
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	300			
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	660			
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	760			
TOTAL CLAIMS (37 CFR 1.16(i))	27	minus 20 = *	7			x 100 =	700			
INDEPENDENT CLAIMS (37 CFR 1.16(h))	1	minus 3 = *				x 460 =	0.00			
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						0.00			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							0.00			
				TOTAL		TOTAL	2420			
* If the difference in column 1 is less than zero, enter "0" in column 2.										
APPLICATION AS AMENDED - PART II										
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY		OTHER THAN SMALL ENTITY		
AMENDMENT A		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=	x	=		x	=
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x	=		x	=
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
						TOTAL ADD'L FEE			TOTAL ADD'L FEE	
AMENDMENT B		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=	x	=		x	=
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x	=		x	=
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
						TOTAL ADD'L FEE			TOTAL ADD'L FEE	
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.										

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Kyle Thomas Kestner
				Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	1	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-2,386,919	10-16-1945	Tobey	
	**	US-2,900,806	08-25-1959	Wurtz et al.	
	**	US-2,934,913	05-03-1960	Haines et al.	
	**	US-3,042,384	07-03-1962	Bauman	
	**	US-3,275,393	09-27-1966	Stentz et al.	
	**	US-3,301,618	01-31-1967	Feldser et al.	
	**	US-3,308,633	03-14-1967	Kritzer, Jr.	
	**	US-3,393,630	07-23-1968	Pickens	
	**	US-3,414,709	12-03-1968	Tricault	
	**	US-3,696,720	10-10-1972	Vinson	
	**	US-3,950,632	04-13-1976	Rivelli	
	**	US-3,979,056	09-07-1976	Barnes	
	**	US-4,036,995	07-19-1977	Koether et al.	
	**	US-4,077,690	03-07-1978	Koether	
	**	US-4,093,041	06-06-1978	Davis et al.	
	**	US-4,278,872	07-14-1981	Koether et al.	
	**	US-4,306,616	12-22-1981	Woods, Jr. et al.	
	**	US-4,355,521	10-26-1982	Tsai	
	**	US-4,388,689	06-14-1983	Hayman et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
	**	JP-10079088	03-24-1998	Toshiba Eng. Co. Ltd.		
	**	JP-11342061	12-14-1999	Shinwa Denshi Device Hanbai KK and NT Corporation:KK		
	**	JP-8000414	01-09-1996	Yamatake Honeywell Co. Ltd.		
	**	WO-01/31533-A1	05-03-2001	Salerno, Mark		
	**	WO-2005/034633-A1	04-21-2005	Duke Mfg Co		
	**					

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Kyle Thomas Kestner
				Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	2	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-4,530,067	07-16-1985	Dorr	
	**	US-4,569,421	02-11-1986	Sandstedt	
	**	US-4,610,238	09-09-1986	Veth	
	**	US-4,633,230	12-30-1986	Tam	
	**	US-4,644,931	02-24-1987	Veth	
	**	US-4,688,475	08-25-1987	Witt et al.	
	**	US-4,740,888	04-26-1988	Ceste, Sr. et al.	
	**	US-4,742,455	05-03-1988	Schreyer	
	**	US-4,782,445	11-01-1988	Pasquini	
	**	US-4,812,625	03-14-1989	Ceste, Sr.	
	**	US-4,812,963	03-14-1989	Albrecht et al.	
	**	US-4,864,498	09-05-1989	Pasquini et al.	
	**	US-4,911,068	03-27-1990	Koether et al.	
	**	US-4,922,435	05-01-1990	Cahlander et al.	
	**	US-5,003,472	03-26-1991	Perrill et al.	
	**	US-5,069,273	12-03-1991	O'Hearne	
	**	US-5,093,556	03-03-1992	Oelfke	
	**	US-5,128,862	07-07-1992	Mueller	
	**	US-5,132,914	07-21-1992	Cahlander et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Kyle Thomas Kestner
				Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	3	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-5,172,328	12-15-1992	Cahlander et al.	
	**	US-5,188,020	02-23-1993	Buchnag	
	**	US-5,216,918	06-08-1993	Landis et al.	
	**	US-5,218,527	06-08-1993	Ishikawa et al.	
	**	US-5,247,807	09-28-1993	Jarman et al.	
	**	US-5,253,564	10-19-1993	Rosenbrock et al.	
	**	US-5,357,426	10-18-1994	Morita et al.	
	**	US-5,485,780	01-23-1996	Koether et al.	
	**	US-5,504,589	04-02-1996	Montague et al.	
	**	US-5,510,979	04-23-1996	Moderi et al.	
	**	US-5,539,671	07-23-1996	Albrecht et al.	
	**	US-5,553,312	09-03-1996	Gatley et al.	
	**	US-5,579,952	12-03-1996	Fiedler et al.	
	**	US-5,590,586	01-07-1997	Ulfig et al.	
	**	US-5,594,222	01-14-1997	Caldwell	
	**	US-5,616,269	04-01-1997	Fowler et al.	
	**	US-5,653,906	08-05-1997	Fowler et al.	
	**	US-5,724,886	03-10-1998	Ewald et al.	
	**	US-5,772,072	06-30-1998	Prescott et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>			Complete if Known		
			Application Number	Not Yet Assigned	
			Filing Date	Concurrently Herewith	
			First Named Inventor	Kyle Thomas Kestner	
			Art Unit	Not Yet Assigned	
			Examiner Name	Not Yet Assigned	
Sheet	4	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-5,783,803	07-21-1998	Robards, Jr.	
	**	US-5,812,393	09-22-1998	Drucker	
	**	US-5,900,173	05-04-1999	Robards, Jr.	
	**	US-5,921,096	07-13-1999	Warren	
	**	US-5,931,083	08-03-1999	Stanger et al.	
	**	US-5,939,974	08-17-1999	Heagle et al.	
	**	US-5,944,324	08-31-1999	Schultheis et al.	
	**	US-5,947,012	09-07-1999	Ewald et al.	
	**	US-6,000,622	12-14-1999	Tonner et al.	
	**	US-6,006,996	12-28-1999	Bhatnagar	
	**	US-6,011,243	01-04-2000	Arnold et al.	
	**	US-6,026,372	02-15-2000	Savage	
	**	US-6,031,208	02-29-2000	Witt et al.	
	**	US-6,052,667	04-18-2000	Walker et al.	
	**	US-6,088,681	07-11-2000	Coleman et al.	
	**	US-6,114,659	09-05-2000	Finck et al.	
	**	US-6,116,154	09-12-2000	Vaselloff	
	**	US-6,119,587	09-19-2000	Ewald et al.	
	**	US-6,153,244	11-28-2000	Stanger et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Kyle Thomas Kestner
				Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	5	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-6,158,885	12-12-2000	Landis	
	**	US-6,175,099	01-16-2001	Shei et al.	
	**	US-6,200,944	03-13-2001	Dovey et al.	
	**	US-6,209,447	04-03-2001	Ewald et al.	
	**	US-6,257,010	07-10-2001	Shei et al.	
	**	US-6,261,621	07-17-2001	Stanger et al.	
	**	US-6,262,394	07-17-2001	Shei et al.	
	**	US-6,412,403	07-02-2002	Veltrop	
	**	US-6,434,961	08-20-2002	Richmond et al.	
	**	US-6,502,411	01-07-2003	Okamoto	
	**	US-6,541,739	04-01-2003	Shei et al.	
	**	US-6,637,322	10-28-2003	Veltrop	
	**	US-6,658,994-B1	12-09-2003	McMillan	
	**	US-6,825,447	11-30-2004	Kim et al.	
	**	US-6,834,276	12-21-2004	Jensen et al.	
	**	US-6,878,391	04-12-2005	Veltrop	
	**	US-6,884,451	04-26-2005	Veltrop	
	**	US-7,028,498	04-18-2006	Monroe et al.	
	**	US-7,105,779	09-12-2006	Shei	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Kyle Thomas Kestner
				Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	6	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-7,132,926	11-07-2006	Vaselloff et al.	
	**	US-7,227,102	06-05-2007	Shei	
	**	US-7,235,762	06-26-2007	Gagas et al.	
	**	US-7,238,654	07-03-2007	Hodge et al.	
	**	US-7,258,064	08-21-2007	Vaselloff et al.	
	**	US-7,279,659	10-09-2007	Gagas et al.	
	**	US-7,328,654	02-12-2008	Shei	
	**	US-7,376,485	05-20-2008	Salerno	
	**	US-7,381,927	06-03-2008	Agnello	
	**	US-7,385,160	06-10-2008	Jones	
	**	US-7,446,282	11-04-2008	Shei et al.	
	**	US-7,628,107	12-08-2009	Vaselloff et al.	
	**	US-7,762,636	07-27-2010	Veesser et al.	
	**	US-7,858,906	12-28-2010	Veltrop et al.	
	**	US-7,905,173	03-15-2011	Sus et al.	
	**	US-7,971,523	07-05-2011	Hartfelder et al.	
	**	US-8,091,472	01-10-2012	Maciejewski et al.	
	**	US-8,096,231	01-17-2012	Veltrop et al.	
	**	US-8,134,101	03-13-2012	Majchrzak	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Kyle Thomas Kestner
				Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	7	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-8,247,745	08-21-2012	Chung et al.	
	**	US-8,404,292	03-26-2013	Veltrop et al.	
	**	US-8,522,675	09-03-2013	Veltrop	
	**	US-8,558,142	10-15-2013	Theodos et al.	
	**	US-8,667,807	03-11-2014	Veltrop	
	**	US-8,997,636	04-07-2015	Kirby et al.	
	**	US-9,003,820	04-14-2015	Veltrop	
	**	US-9,068,768	06-30-2015	Veltrop	
	**	US-9,140,484	09-22-2015	Veltrop	
	**	US-9,140,485	09-22-2015	Veltrop	
	**	US-D063818	01-22-1924	Curtiss	
	**	US-D243362	02-08-1977	Shumrak et al.	
	**	US-D341054	11-09-1993	Maputol	
	**	US-D364530	11-28-1995	Robards, Jr. et al.	
	**	US-D369269	04-30-1996	Labadia Del Fresno	
	**	US-D427008	06-27-2000	Wasner	
	**	US-D427479	07-04-2000	Wasner	
	**	US-D434265	11-28-2000	Tatlow	
	**	US-D480260	10-07-2003	Domi et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>			Complete if Known		
			Application Number	Not Yet Assigned	
			Filing Date	Concurrently Herewith	
			First Named Inventor	Kyle Thomas Kestner	
			Art Unit	Not Yet Assigned	
			Examiner Name	Not Yet Assigned	
Sheet	8	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-D570715	06-10-2008	Di Federico	
	**	US-D704982	05-20-2014	Gates	
	**	US-D716095	10-28-2014	Veltrop et al.	
	**	US-RE40151	03-18-2008	Shei et al.	
	**	US-RE40290	05-06-2008	Shei et al.	
	**	US-2001/0007322	07-12-2001	Shei et al.	
	**	US-2001/0053963	12-20-2001	Kim et al.	
	**	US-2003/0118706-A1	06-26-2003	Veltrop	
	**	US-20040000162	01-01-2004	Song	
	**	US-2004/0016242	01-29-2004	Song et al.	
	**	US-2004/0019534	01-29-2004	Callahan et al.	
	**	US-2004/0020915	02-05-2004	Shei	
	**	US-2004/0060320	04-01-2004	Roh et al.	
	**	US-2005/0211696-A1	09-29-2005	Adamski	
	**	US-20050236947	10-27-2005	LeClear et al.	
	**	US-2006/0150662	07-13-2006	Lee et al.	
	**	US-2006/0185527-A1	08-24-2006	Shei	
	**	US-20070017245	01-25-2007	Song et al.	
	**	US-20070144202	06-28-2007	Theodos et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>			Complete if Known		
			Application Number	Not Yet Assigned	
			Filing Date	Concurrently Herewith	
			First Named Inventor	Kyle Thomas Kestner	
			Art Unit	Not Yet Assigned	
			Examiner Name	Not Yet Assigned	
Sheet	9	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-20070251397	11-01-2007	Dorsten et al.	
	**	US-2008/0023462-A1	01-31-2008	Shei et al.	
	**	US-20080213449	09-04-2008	Wisner et al.	
	**	US-2008/0302778	12-11-2008	Veltrop et al.	
	**	US-2009/0045185	02-19-2009	Schroeder et al.	
	**	US-2009/0126580-A1	05-21-2009	Hartfelder et al.	
	**	US-2009/0199723-A1	08-13-2009	Veltrop et al.	
	**	US-2009/0199725-A1	08-13-2009	Veltrop et al.	
	**	US-2009/0266244-A1	10-29-2009	Maciejewski et al.	
	**	US-20090309027	12-17-2009	Von Striver	
	**	US-20100205992	08-19-2010	Morris	
	**	US-2011/0030565	02-10-2011	Shei	
	**	US-2011/0252813-A1	10-20-2011	Veltrop	
	**	US-2011/0253698-A1	10-20-2011	Theodos et al.	
	**	US-2011/0253703-A1	10-20-2011	THEODOS et al.	
	**	US-2011/0278278-A1	11-17-2011	Emerich et al.	
	**	US-2011/0283895-A1	11-24-2011	Veltrop	
	**	US-2012/0079699	04-05-2012	Veltrop et al.	
	**	US-2012/0261426-A1	10-18-2012	Tomczyk et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>			Complete if Known		
			Application Number	Not Yet Assigned	
			Filing Date	Concurrently Herewith	
			First Named Inventor	Kyle Thomas Kestner	
			Art Unit	Not Yet Assigned	
			Examiner Name	Not Yet Assigned	
Sheet	10	of	11	Attorney Docket Number	29178/50736CON1

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	**	US-2012/0285942	11-15-2012	Godecker et al.	
	**	US-2013/0175253-A1	07-11-2013	Shei et al.	
	**	US-2014/0010937-A1	01-09-2014	Stanger	
	**	US-2014/0057031-A1	02-27-2014	Ewald et al.	
	**	US-2014/0083309-A1	03-27-2014	Reese et al.	
	**	US-2014/0130684-A1	05-15-2014	Reese et al.	
	**	US-2014/0150461	06-05-2014	Veltrop	
	**	US-2014/0165644	06-19-2014	Veltrop	
	**	US-2014/0174101	06-26-2014	Veltrop	
	**	US-2014/0197177	07-17-2014	Veltrop et al.	
	**	US-2014/0246966-A1	09-04-2014	Nevarez	
	**	US-2014/0263269-A1	09-18-2014	Veltrop et al.	
	**	US-2015/0201749-A1	07-23-2015	Turner et al.	
	**	US-2015/0201803-A1	07-23-2015	Veltrop	
		US-8,607,587	12-17-2013	Veltrop	
		US-9,854,943	01-02-2018	Betzold et al.	
		US-D725429	03-31-2015	Veltrop et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Kyle Thomas Kestner
				Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	11	of	11	Attorney Docket Number	29178/50736CON1

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	**	"Modular Holding Cabinets", Product Catalog, Carter-Hoffmann, Mundelein, Illinois (January 2014).	
	**	Frymaster HCP Installation and Operation Manual, December 2006, pages 1-1 to 10-4, title page and table of publisher, Enodis, Frymaster LLC, Shreveport, LA.	
	**	Prince Castle LLC, Holding Bins (www.princecastle.com < http://www.princecastle.com >).	
	**	Prince Castle LLC, Holding Panels (www.princecastle.com < http://www.princecastle.com >).	
	**	Reider, "How to Say What Stuff Looks Like, Ontario, Canada: Marcus Books, p.62 (1995).	
	**	Thermodyne Food Products, Inc., Counter Top Holding Oven Model 300 NDNL specification.	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

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

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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.

TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

NOTE: This form is to be submitted with the Power of Attorney by Applicant form (PTO/AIA/82B) to identify the application to which the Power of Attorney is directed, in accordance with 37 CFR 1.5, unless the application number and filing date are identified in the Power of Attorney by Applicant form. If neither form PTO/AIA/82A nor form PTO/AIA82B identifies the application to which the Power of Attorney is directed, the Power of Attorney will not be recognized in the application.

Application Number	Not Yet Assigned		
Filing Date	Concurrently Herewith		
First Named Inventor	Kyle Thomas Kestner		
Title	MULTI-ZONE FOOD HOLDING BIN		
Art Unit	Not Yet Assigned		
Examiner Name	Not Yet Assigned		
Attorney Docket Number	29178/50736CON1		
SIGNATURE of Applicant or Patent Practitioner			
Signature	/Andrew M. Lawrence/	Date (Optional)	May 3, 2019
Name	Andrew M. Lawrence	Registration Number	46,130
Title (if Applicant is a juristic entity)			
Applicant Name (if Applicant is a juristic entity)			
NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. If more than one applicant, use multiple forms.			
☐ *Total of <u>1</u> forms are submitted.			

POWER OF ATTORNEY BY APPLICANT

I hereby revoke all previous powers of attorney given in the application identified in either the attached transmittal letter or the boxes below.

Application Number

Filing Date

(Note: The boxes above may be left blank if information is provided on form PTO/AIA/82A.)

☒ I hereby appoint the Patent Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above:

04743

OR

☐ I hereby appoint Practitioner(s) named in the attached list (form PTO/AIA/82C) as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the patent application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above. (Note: Complete form PTO/AIA/82C.)

Please recognize or change the correspondence address for the application identified in the attached transmittal letter or the boxes above to:

☐ The address associated with the above-mentioned Customer Number

OR

☐ The address associated with Customer Number:

OR

Firm or
Individual Name

Address

City

State

Zip

Country

Telephone

Email

I am the Applicant (if the Applicant is a juristic entity, list the Applicant name in the box):

PRINCE CASTLE LLC

☐ Inventor or Joint Inventor (title not required below)

☐ Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)

☒ Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)

☐ Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)

SIGNATURE of Applicant for Patent

The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant (e.g., where the applicant is a juristic entity).

Signature

Date (Optional)

Name

Loren Veltrop

Title

Vice President

NOTE: Signature - This form must be signed by the applicant in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. If more than one applicant, use multiple forms.

☐ Total of 1 forms are submitted.

Electronic Patent Application Fee Transmittal				
Application Number:				
Filing Date:				
Title of Invention:		MULTI-ZONE FOOD HOLDING BIN		
First Named Inventor/Applicant Name:		Kyle Thomas Kestner		
Filer:		Andrew Michael Lawrence/Grace DiCosola		
Attorney Docket Number:		29178/50736CON1		
Filed as Large Entity				
Filing Fees for Track I Prioritized Examination - Nonprovisional Application under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
UTILITY APPLICATION FILING	1011	1	300	300
UTILITY SEARCH FEE	1111	1	660	660
UTILITY EXAMINATION FEE	1311	1	760	760
REQUEST FOR PRIORITIZED EXAMINATION	1817	1	4000	4000
Pages:				
Claims:				
CLAIMS IN EXCESS OF 20	1202	7	100	700
Miscellaneous-Filing:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
PROCESSING FEE, EXCEPT PROV. APPLS.	1830	1	140	140
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				6560

Electronic Acknowledgement Receipt	
EFS ID:	35918200
Application Number:	16403349
International Application Number:	
Confirmation Number:	6614
Title of Invention:	MULTI-ZONE FOOD HOLDING BIN
First Named Inventor/Applicant Name:	Kyle Thomas Kestner
Customer Number:	04743
Filer:	Andrew Michael Lawrence/Grace DiCosola
Filer Authorized By:	Andrew Michael Lawrence
Attorney Docket Number:	29178/50736CON1
Receipt Date:	03-MAY-2019
Filing Date:	
Time Stamp:	19:10:49
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$6560
RAM confirmation Number	050619INTEFSW19115701
Deposit Account	132855
Authorized User	Grace DiCosola
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal of New Application	Utility_Patent_Application_Transmittal.PDF	34311	no	1
			bdefcf588425274b60bed928d7515ca154fed580		
Warnings:					
Information:					
2	Oath or Declaration filed	Executed_Declaration_29178_50736CON1.PDF	5631654	no	4
			71bcb19e755aac1702a3b588783f51bc9cf7abea		
Warnings:					
Information:					
3	Application Data Sheet	Application_Data_Sheet.PDF	31449	no	7
			7d15e1a60ca1e5dee531f95c21039b1653a8e826		
Warnings:					
Information:					
This is not an USPTO supplied ADS fillable form					
4	TrackOne Request	Certification_and_Request_for_Prioritized_Examination.PDF	33337	no	1
			a5838254db01377c56754e23bc5d94aafe488b6a		
Warnings:					
Information:					
5	Nonpublication request from applicant	Nonpublication_Request.PDF	18536	no	1
			a8fcc8de7e0a76e57bf125f93483a6f7f5db5051		
Warnings:					
Information:					
6		Continuation_Application_29178_50736CON1.PDF	66001	yes	21
			781de9187c18ad3cf8216327195dc88b04e9b448		

	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Abstract		21	21	
	Claims		16	20	
	Specification		1	15	
Warnings:					
Information:					
7	Drawings-only black and white line drawings	Drawings_FOR_FILING_29178_50736CON1.PDF	1841106 1175218f63732669bf056b3c9737117a0620c160	no	6
Warnings:					
Information:					
8	Transmittal Letter	Continuation_Information_Disclosure_Statement_IDS_29178_50736CON1.PDF	17151 31b9d222c4433fe28cec747ffe634bdb8e5c2df1	no	2
Warnings:					
Information:					
9	Information Disclosure Statement (IDS) Form (SB08)	PTO_SB08_29178_50736CON1.PDF	130336 abce1feafc48384a2236cc0665a5d0095e117daa	no	11
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
10	Power of Attorney	POA_or_Authorization_of_Agent.PDF	474393 c289a451c60b2681e80d97b7c18ecbb55d88fe21	no	2
Warnings:					
Information:					
11	Fee Worksheet (SB06)	fee-info.pdf	40284 95b94cce2df6156659269b1e20bee590e4e2c1b2d	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			8318558		

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.

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.

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.

UTILITY PATENT APPLICATION TRANSMITTAL		Attorney Docket No. 29178/50736CON1	
		First Named Inventor Kyle Thomas Kestner	
		Title	MULTI-ZONE FOOD HOLDING BIN
(Only for new nonprovisional applications under 37 CFR 1.53(b))		Priority Mail Express® Label No.	

APPLICATION ELEMENTS <i>See MPEP chapter 600 concerning utility patent application contents.</i> 1. ☐ Fee Transmittal Form (PTO/SB/17 or equivalent) 2. ☐ Applicant asserts small entity status. See 37 CFR 1.27 3. ☐ Applicant certifies micro entity status. See 37 CFR 1.29. Applicant must attach form PTO/SB/15A or B or equivalent. 4. ☒ Specification [Total Pages <u>21</u>] Both the claims and abstract must start on a new page. (See MPEP § 608.01(a) for information on the preferred arrangement) 5. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets <u>6</u>] 6. ☐ Inventor's Oath or Declaration [Total Pages <u>4</u>] (including substitute statements under 37 CFR 1.64 and assignments serving as an oath or declaration under 37 CFR 1.63(e)) a. ☐ Newly executed (original or copy) b. ☒ A copy from a prior application (37 CFR 1.63(d)) 7. ☒ Application Data Sheet * See note below. See 37 CFR 1.76 (PTO/AIA/14 or equivalent) 8. CD-ROM or CD-R in duplicate, large table, or Computer Program (Appendix) ☐ Landscape Table on CD 9. Nucleotide and/or Amino Acid Sequence Submission (if applicable, items a. – c. are required) a. ☐ Computer Readable Form (CRF) b. ☐ Specification Sequence Listing on: i. ☐ CD-ROM or CD-R (2 copies); or ii. ☐ Paper c. ☐ Statements verifying identity of above copies	ADDRESS TO: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 ACCOMPANYING APPLICATION PAPERS 10. ☐ Assignment Papers (cover sheet & document(s)) Name of Assignee 11. ☐ 37 CFR 3.73(c) Statement (when there is an assignee) ☒ Power of Attorney 12. ☐ English Translation Document (if applicable) 13. ☒ Information Disclosure Statement (PTO/SB/08 or PTO-1449) ☐ Copies of citations attached 14. ☐ Preliminary Amendment 15. ☐ Return Receipt Postcard (MPEP § 503) (Should be specifically itemized) 16. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed) 17. ☒ Nonpublication Request Under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or equivalent. 18. ☒ Other: Certification And Request For Prioritized Examination 37 CFR 1.102(e)
---	---

***Note:** (1) Benefit claims under 37 CFR 1.78 and foreign priority claims under 1.55 **must** be included in an Application Data Sheet (ADS).
(2) For applications filed under 35 U.S.C. 111, the application must contain an ADS specifying the applicant if the applicant is an assignee, person to whom the inventor is under an obligation to assign, or person who otherwise shows sufficient proprietary interest in the matter. See 37 CFR 1.46(b).

19. CORRESPONDENCE ADDRESS			
☒ The address associated with Customer Number: <u>04743</u> OR ☐ Correspondence address below			
Name			
Address			
City	State	Zip Code	
Country	Telephone	Email	
Signature	/Andrew M. Lawrence/		Date
Name (Print/Type)	Andrew M. Lawrence		Registration No. (Attorney/Agent)
		46,130	

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office electronic filing system in accordance with 37 C.F.R. § 1.6(a)(4).

Dated: May 3, 2019

Signature: /Andrew M. Lawrence/ (Andrew M. Lawrence, Reg. No. 46,130)

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)	
Title of Invention	Mutli-Zone Food Holding Bin
As the below named inventor, I hereby declare that: This declaration ☐ The attached application, or is directed to: ☒ United States application or PCT international application number <u>15/134,380</u> filed on <u>04/20/2016</u> ☐ As Amended on _____ (if applicable) The above-identified application was made or authorized to be made by me. I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I have reviewed and understand the contents of the above identified specification, including the claims, as amended by an amendment, if any, specifically referred to herein. I acknowledge the duty to disclose information that is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information that became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both. WARNING: Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.	
LEGAL NAME OF INVENTOR Inventor: <u>Kyle Thomas Kestner</u> Date (Optional): _____ Signature: 	
Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.	

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)	
Title of Invention	Mutli-Zone Food Holding Bin
As the below named inventor, I hereby declare that: This declaration ☐ The attached application, or is directed to: ☒ United States application or PCT international application number <u>15/134,380</u> filed on <u>04/20/2016</u>. ☐ As Amended on _____ (if applicable) The above-identified application was made or authorized to be made by me. I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I have reviewed and understand the contents of the above identified specification, including the claims, as amended by an amendment, if any, specifically referred to herein. I acknowledge the duty to disclose information that is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information that became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both. WARNING: Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.	
LEGAL NAME OF INVENTOR Inventor: <u>Christopher B. Lyons, Jr.</u> Date (Optional): _____ Signature: 	
Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.	

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)**Title of
Invention**

Mutli-Zone Food Holding Bin

As the below named inventor, I hereby declare that:

This declaration ☐ The attached application, or
is directed to:☒ United States application or PCT international application number 15/134,380
filed on 04/20/2016☐ As Amended on _____ (if applicable)

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the above identified specification, including the claims, as amended by an amendment, if any, specifically referred to herein. I acknowledge the duty to disclose information that is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information that became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTORInventor: Charles B. Hartfelder Date (Optional): _____Signature: Charles B. Hartfelder

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)**Title of Invention**

Multi-Zone Food Holding Bin

As the below named inventor, I hereby declare that:

This declaration ☐ The attached application, or is directed to:☒ United States application or PCT international application number 15/134,380
filed on 04/20/2016☐ As Amended on _____ (if applicable)

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the above identified specification, including the claims, as amended by an amendment, if any, specifically referred to herein. I acknowledge the duty to disclose information that is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information that became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTORInventor: Zachary N. McCoy Date (Optional): _____Signature: *Zachary N. McCoy*

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

Application Data Sheet

Inventor Information

Inventor Number::	1
Name Prefix::	Mr.
Given Name::	Kyle
Middle Name::	Thomas
Family Name::	Kestner
City of Residence::	Schaumburg
State or Province of Residence::	IL
Country of Residence::	US
Street of mailing address::	736 Terrace Ct.
City of mailing address::	Schaumburg
State or Province of mailing address::	IL
Country of mailing address::	US
Postal or Zip Code of mailing address::	60193
Inventor Number::	2
Name Prefix::	Mr.
Given Name::	Christopher
Middle Name::	B.
Family Name::	Lyons
Name Suffix::	Jr.
City of Residence::	Lagrange

State or Province of Residence:: IL
Country of Residence:: US
Street of mailing address:: 1415 41st Street
City of mailing address:: Lagrange
State or Province of mailing address:: IL
Country of mailing address:: US
Postal or Zip Code of mailing address:: 60525

Inventor Number:: 3
Name Prefix:: Mr.
Given Name:: Charles
Middle Name:: B.
Family Name:: Hartfelder
City of Residence:: Hanover Park
State or Province of Residence:: IL
Country of Residence:: US
Street of mailing address:: 7614 Churchill Dr.
City of mailing address:: Hanover Park
State or Province of mailing address:: IL
Country of mailing address:: US
Postal or Zip Code of mailing address:: 60133

Inventor Number:: 4

Name Prefix::	Mr.
Given Name::	Zachary
Middle Name::	N.
Family Name::	McCoy
City of Residence::	South Elgin
State or Province of Residence::	IL
Country of Residence::	US
Street of mailing address::	764 Kateland Way
City of mailing address::	South Elgin
State or Province of mailing address::	IL
Country of mailing address::	US
Postal or Zip Code of mailing address::	60177

Correspondence Information

Correspondence Customer Number::	04743
----------------------------------	-------

Application Information

Application Type::	Regular
Subject Matter::	Utility
CD-ROM or CD-R?::	None
Sequence submission?::	None
Computer Readable Form (CRF)?::	No
Title::	MULTI-ZONE FOOD HOLDING BIN

Attorney Docket Number:: 29178/50736CON1

Request for Early Publication?:: No

Request for Non-Publication?:: Yes

Total Drawing Sheets:: 6

Small Entity?:: No

Petition included?:: No

Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2:: No

Representative Information

Representative Customer Number:: 04743

Domestic Priority Information

Application::	Continuity Type::	Parent Application::	Parent Filing Date::	Prior Appl Status::
This Application	Continuation of	15/984,760	05/21/18	Pending
15/984,760	Continuation of	15/134,380	04/20/16	Patented

Foreign Priority Information

Applicant Information

Applicant Number::	1
Applicant Type::	Assignee
Organization Name::	PRINCE CASTLE LLC
Street of mailing address::	355 East Kehoe Boulevard
City of mailing address::	Carol Stream
State or Province of mailing address::	IL
Country of mailing address::	US
Postal or Zip Code of mailing address::	60188

Assignee Information Including Non-Applicant Assignee Information

Assignee Number::	1
Organization Name::	PRINCE CASTLE LLC
Street of mailing address::	355 East Kehoe Boulevard
City of mailing address::	Carol Stream
State or Province of mailing address::	IL
Country of mailing address::	US
Postal or Zip Code of mailing address::	60188

Authorization or Opt-Out of Authorization to Permit Access

When this Application Data Sheet is properly signed and filed with the application, applicant has provided written authority to permit a participating foreign intellectual property (IP) office access to the instant application-as-filed (see paragraph A in subsection 1 below) and the European Patent Office (EPO) access to any search results from the instant application (see paragraph B in subsection 1 below).

Should applicant choose not to provide an authorization identified in subsection 1 below, applicant **must opt-out** of the authorization by checking the corresponding box A or B or both in subsection 2 below.

NOTE: This section of the Application Data Sheet is **ONLY** reviewed and processed with the **INITIAL** filing of an application. After the initial filing of an application, an Application Data Sheet cannot be used to provide or rescind authorization for access by a foreign IP office(s). Instead, Form PTO/SB/39 or PTO/SB/69 must be used as appropriate.

1. Authorization to Permit Access by a Foreign Intellectual Property Office(s)

A. Priority Document Exchange (PDX) - Unless box A in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO), the World Intellectual Property Organization (WIPO), and any other foreign intellectual property office participating with the USPTO in a bilateral or multilateral priority document exchange agreement in which a foreign application claiming priority to the instant patent application is filed, access to: (1) the instant patent application-as-filed and its related bibliographic data, (2) any foreign or domestic application to which priority or benefit is claimed by the instant application and its related bibliographic data, and (3) the date of filing of this Authorization. See 37 CFR 1.14(h)(1).

B. Search Results from U.S. Application to EPO - Unless box B in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the EPO access to the bibliographic data and search results from the instant patent application when a European patent application claiming priority to the instant patent application is filed. See 37 CFR 1.14(h)(2).

The applicant is reminded that the EPO's Rule 141(1) EPC (European Patent Convention) requires applicants to submit a copy of search results from the instant application without delay in a European patent application that claims priority to the instant application.

2. Opt-Out of Authorizations to Permit Access by a Foreign Intellectual Property Office(s)

☐ A. Applicant **DOES NOT** authorize the USPTO to permit a participating foreign IP office access to the instant application-as-filed. If this box is checked, the USPTO will not be providing a participating foreign IP office with any documents and information identified in subsection 1A above.

☐ B. Applicant **DOES NOT** authorize the USPTO to transmit to the EPO any search results from the instant patent application. If this box is checked, the USPTO will not be providing the EPO with search results from the instant application.

NOTE: Once the application has published or is otherwise publicly available, the USPTO may provide access to the application in accordance with 37 CFR 1.14.

Signature:

NOTE: This Application Data Sheet must be signed in accordance with 37 CFR 1.33(b). **However, if this Application Data Sheet is submitted with the INITIAL filing of the application and either box A or B is not checked in subsection 2 of the “Authorization or Opt-Out of Authorization to Permit Access” section, then this form must also be signed in accordance with 37 CFR 1.14(c).**

This Application Data Sheet **must** be signed by a patent practitioner if one or more of the applicants is a **juristic entity** (e.g., corporation or association). If the applicant is two or more joint inventors, this form must be signed by a patent practitioner, **all** joint inventors who are the applicant, or one or more joint inventor-applicants who have been given power of attorney (e.g., see USPTO Form PTO/AIA/81) on behalf of **all** joint inventor-applicants.

See 37 CFR 1.4(d) for the manner of making signatures and certifications.

Signature	/Andrew M. Lawrence/	Date (YYYY-MM-DD)	2019-05-03
Name	Andrew M. Lawrence	Registration Number	46,130

First Named Inventor:	Kyle Thomas Kestner	Nonprovisional Application Number (if known):	Not Yet Assigned
Title of Invention:	MULTI-ZONE FOOD HOLDING BIN		

1. The processing fee set forth in 37 CFR 1.17(i)(1) and the prioritized examination fee set forth in 37 CFR 1.17(c) have been filed with the request. The publication fee requirement is met because that fee, set forth in 37 CFR 1.18(d), is currently \$0. The basic filing fee, search fee, and examination fee are filed with the request or have been already been paid. I understand that any required excess claims fees or application size fee must be paid for the application.
2. I understand that the application may not contain, or be amended to contain, more than four independent claims, more than thirty total claims, or any multiple dependent claims, and that any request for an extension of time will cause an outstanding Track I request to be dismissed.
3. The applicable box is checked below:

- II. ☐ Request for Continued Examination - Prioritized Examination under § 1.102(e)(2)

- | | | | |
|--|----------------------|-------------------------------------|-------------|
| Signature | /Andrew M. Lawrence/ | Date | May 3, 2019 |
| Name
(Print/Typed) | Andrew M. Lawrence | Practitioner
Registration Number | 46,130 |
| <p>Note: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required.*</p> | | | |
| <p>☐ *Total of <u>1</u> forms are submitted.</p> | | | |

Signature: /Andrew M. Lawrence/ (Andrew M. Lawrence, Reg. No. 46,130)

NONPUBLICATION REQUEST UNDER 35 U.S.C. 122(b)(2)(B)(i)	First Named Inventor	Kyle Thomas Kestner
	Title	MULTI-ZONE FOOD HOLDING BIN
	Attorney Docket Number	29178/50736CON1

I hereby certify that the invention disclosed in the attached application **has not and will not be** the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

I hereby request that the attached application not be published under 35 U.S.C. 122(b).

/Andrew M. Lawrence/
Signature

May 3, 2019
Date

Andrew M. Lawrence
Typed or printed name

46,130
Registration Number, if applicable

(312) 474-6300
Telephone Number

This request must be signed in compliance with 37 CFR 1.33(b) and submitted with the application **upon filing**.

Applicant may rescind this nonpublication request at any time. If applicant rescinds a request that an application not be published under 35 U.S.C. 122(b), the application will be scheduled for publication at eighteen months from the earliest claimed filing date for which a benefit is claimed.

If applicant subsequently files an application directed to the invention disclosed in the attached application in another country, or under a multilateral international agreement, that requires publication of applications eighteen months after filing, the applicant **must** notify the United States Patent and Trademark Office of such filing within forty-five (45) days after the date of the filing of such foreign or international application. **Failure to do so will result in abandonment of this application (35 U.S.C. 122(b)(2)(B)(iii)).**

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office electronic filing system in accordance with 37 C.F.R. § 1.6(a)(4).

Dated: May 3, 2019

Signature: /Andrew M. Lawrence/ (Andrew M. Lawrence, Reg. No. 46,130)

- 21 -

ABSTRACT

A multi-zone food holding bin has a continuous food supporting surface with multiple food holding zones. Each food holding zone is independently controllable so that different food temperatures may be maintained in adjacent food holding zones.

- 16 -

What is claimed is:

1. A multi-zone food holding bin comprising:

a chassis having a top panel, a first side panel, a second side panel, a bottom panel, a front face, and an opposing rear face;

a first food holding compartment within the chassis, the first food holding compartment being defined by the first side panel, the second side panel, and a shelf, the first food holding compartment having a first opening, the first opening of the first food holding compartment being configured to allow food items to be placed into and removed from the first food holding compartment;

a substantially planar surface forming a top surface of the shelf and thus a bottom surface of the first food holding compartment, the substantially planar surface extending completely to the first opening of the first food holding compartment, and the substantially planar surface comprising a thermally conductive material;

a first food holding zone formed in the first food holding compartment, the first food holding zone having an independently controllable first heating element disposed at a top portion of the first food holding compartment, and an independently controllable second heating element disposed at a bottom portion of the first food holding compartment, the first food holding zone including a first food holding bay and a second food holding bay, each of the first and second food holding bays being configured to receive a food holding tray; and

a second food holding zone formed in the first food holding compartment, the second food holding zone having an independently controllable third heating element disposed at the top portion of the first food holding compartment and an independently controllable fourth heating element disposed at the bottom portion of the first food holding compartment, the second food holding zone including a third food holding bay and a fourth food holding bay, each of the third and fourth food holding bays being configured to receive a food holding tray,

wherein the first food holding zone and the second food holding zone are adjacent one another across the substantially planar surface and the first food holding zone is configured to

maintain a first temperature and the second food holding zone is configured to maintain a second temperature, the first temperature and the second temperature capable of being different than one another.

2. The food holding bin of claim 1, further comprising:

a second food holding compartment disposed below the first food holding compartment within the chassis, the second food holding compartment being defined by the first side panel, the second side panel, and the shelf, the second food holding compartment having a first opening, the first opening of the second food holding compartment being configured to allow food items to be placed into and removed from the food holding compartment; and

a controller operatively coupled to the second heating element and to the fourth heating element, the controller being configured to independently operate the second heating element and the fourth heating element

wherein the shelf is located between the first and second food holding compartments, the shelf comprises a first side and a second side, the first side facing into the first food holding compartment, the second side facing into the second food holding compartment, and the second and fourth heating elements are disposed in the shelf and in thermal communication with the first side, the second and fourth heating elements being capable of providing different amounts of heat energy into the first and second food holding zones of the first food holding compartment.

3. The food holding bin of claim 1, further comprising a first bezel attached to the chassis, the first bezel comprising dedicated controls and/or dedicated displays for each of the first, second, third, and fourth food holding bays.

4. The food holding bin of claim 3, wherein the first bezel is set forward from the shelf by a space.

5. The food holding bin of claim 4, wherein the space is configured to allow a latch to rotate from a locked position to an unlocked position to release lids held on lid holding ledges elevated above the substantially planar surface.

6. The food holding bin of claim 3, wherein the first bezel comprises dedicated displays and the dedicated display displays a temperature setting for a corresponding food holding bay.

7. The food holding bin of claim 3, wherein the dedicated display displays additional information about a food item stored in the corresponding food holding bay.

8. The food holding bin of claim 2, wherein the first and second food holding compartments each have a second opening, uncovered and located at the rear face of the chassis, and the substantially planar bottom surface is configured to allow food items to be placed on the substantially planar surface through the first opening and removed from the planar and bottom surface from the second opening.

9. The food holding bin of claim 8, wherein the first bezel is located proximate the front face of the chassis, the food holding bin further comprising a second bezel located proximate the opposing rear face of the chassis.

10. The food holding bin of claim 1, further comprising a rotatable latch disposed adjacent the first opening.

11. The food holding bin of claim 10, wherein the latch is located between the first food holding bay and the second food holding bay.

12. The food holding bin of claim 1, wherein the second independently controllable heating elements provides heat energy through conduction.

13. The food holding bin of claim 1, wherein both the first and second independently controllable heating elements comprise a resistive wire.

14. The food holding bin of claim 1, wherein the substantially planar surface is a continuous surface.

15. The food holding bin of claim 14, wherein the substantially planar surface is substantially free of any dividing walls or other structure between the first, second, third, and fourth food holding bays.

16. The food holding bin of claim 1, wherein the first independently controllable heating element comprises a radiant heating source and the second independently controllable heating element provides heat energy through conduction.

17. The food holding bin of claim 1, each food holding bay further comprising a dedicated lid holding shelf elevated above the substantially planar bottom surface in the first food holding compartment, the dedicated lid holding shelf being configured to receive and store a lid for a food holding tray.

18. The food holding bin of claim 17, wherein a rotatable latch disposed adjacent the first opening is rotatable between a locked position in which the latch prevents a lid from being removed from the lid holding shelf, and an unlocked position in which the latch allows removal of a lid from the lid holding shelf, the latch being biased to the locked position by gravity.

19. The food holding bin of claim 17, wherein the ledge comprises sheet metal.

20. The food holding bin of claim 17, wherein the ledge comprises a wire form.

21. The food holding bin of claim 1, wherein the first independently controllable heating element is adapted to output more heat energy than the second heating element.

22. The food holding bin of claim 1, wherein the first independently controllable heating element is a radiant heating element.

23. The food holding bin of claim 1, wherein the substantially planar surface comprises aluminum.

24. The food holding bin of claim 1, further comprising a food holding tray resting on the substantially planar surface.

25. The food holding bin of claim 1, the first food holding zone and the second food holding zone being heated to different temperatures.

26. The food holding bin of claim 2, the shelf comprising an upper thermally conductive plate, a lower thermally conductive plate, a fifth heating element, and a sixth heating element, the fifth and sixth heating elements being disposed between the upper thermally conductive plate and the lower thermally conductive plate, the second and fourth heating

- 20 -

elements being in thermal communication with the upper thermally conductive plate and the fifth and sixth heating elements being in thermal communication with the lower thermally conductive plate, the fifth and sixth heating elements providing heat energy into the second food holding compartment.

27. The food holding bin of claim 26, wherein an insulative material is provided between the second and the fifth heating elements .

MULTI-ZONE FOOD HOLDING BIN

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application is a continuation of U.S. Patent Application No. 15/984,760, filed May 21, 2018, which is a continuation of U.S. Patent Application No. 15/134,380, filed April 20, 2016, which is incorporated herein by reference in their entirety and made a part hereof.

BACKGROUND

[0002] Often the success of a restaurant depends, at least in part, on how quickly customers can be served with ordered food items and also on the quality of the food items when served. If the rate of food preparation equals the rate at which the food is ordered and sold, a restaurant can theoretically have freshly-prepared foods ready to serve for customers as they arrive. Since it is not always possible to match food production with customer ordering rates, and since certain fast food restaurant customers expect to receive their ordered food items quickly, many fast food restaurants prepare various food items in advance and keep them ready for sale until a customer arrives and purchases a pre-cooked food item.

[0003] To facilitate the food holding process, holding bins or holding ovens are often used to keep the food warm. Known holding bins can allow a cooked food item to be inserted from one side and taken from the opposite side whereby food preparers add food to the holding bin on one side and food servers on the opposite side take food from the holding bin. Food holding bins in which the cooked food item is inserted and removed from the same side are also known. The food items in the holding bins are kept warm by heating elements. However, food holding time in known holding bins or ovens is somewhat limited, generally less than 15 or 20 minutes before the food item must be discarded. As a result, restaurants can only keep a limited amount of pre-cooked food items on hand and often a significant amount of the pre-cooked food items must be discarded before they are sold, resulting in additional costs.

BRIEF DESCRIPTION OF THE DRAWINGS

[0004] FIG. 1 is a perspective view of a multi-zone food holding bin;

- 2 -

- [0005] FIG. 2 is a front elevational view of the multi-zone food holding bin of FIG. 1;
- [0006] FIG. 3 is a rear elevational view of the multi-zone food holding bin of FIG. 1;
- [0007] FIG. 4A is a partially cut-away top perspective view of an alternate embodiment of a multi-zone food holding bin, and FIG. 4B is a close up of a shelf portion of the multi-zone food holding bin from circle 4B in FIG. 4A;
- [0008] FIG. 5 is a partially cut-away bottom perspective view of the food holding bin of FIG. 4; and
- [0009] FIG. 6 is a partially cutaway top perspective view of yet another alternate embodiment of a multi-zone food holding bin.

DETAILED DESCRIPTION

[0010] Turning now to FIGS. 1-3, a multi-zone food holding bin 10 includes two separate food holding compartments 50. Additional food holding compartments 50 may also be included as explained in further detail below. Each separate food holding compartment 50 includes two or more separate food holding zones, for example, as illustrated in FIGS. 1-3, a first food holding zone 57a and a second food holding zone 57b. Each food holding zone 57a, 57b may include two food holding bays. For example, the first food holding zone 57a may include a first food holding bay 51a and a second food holding bay 51b. The second food holding zone 57b may include a third food holding bay 51c and a fourth food holding bay 51d. Each food holding bay 51a, 51b, 51c, 51d is capable of receiving a single food holding tray 27 and/or a single lid 21, as illustrated in the third food holding bay 51c in FIG. 2. The food holding bays 51a, 51b, 51c, and 51d are illustrated as being separated from one another by a dashed line in FIGS. 1-3. The dashed lines are for illustration only. The food holding bays need not have their boundaries identified with any sort of line or other indicia in food holding compartment 50. Each food holding zone 57a, 57b can be configured to maintain a different food holding temperature, advantageously allowing the operator to hold different food products with different heating requirements in the same food holding compartment 50, thereby permitting increased energy efficiencies to be realized and potentially reducing the space requirements for holding different foods. For example, a first food product can be held in the first food holding bay 51a of the first

food holding zone 57a and a second food product, which may be the same as the first food product or different from the first food product as long as both food products have substantially the same temperature requirements, can be held in the second food holding bay 51b of the first food holding zone 57a. Both the first food holding bay 51a and the second food holding bay 51b are held at a first temperature by independently controllable upper and lower heating elements. A third food product can be held in the third food holding bay 51c of the second food holding zone 57b and a fourth food product, which may be the same as the third food product or different from the third food product as long as both food products have substantially the same temperature requirements, may be held in the fourth food holding bay 51d of the second food holding zone 57b. Both the third food holding bay 51c and the fourth food holding bay 51d are held at a second temperature by independently controllable upper and lower heating elements. Because the heating elements used to heat the second food holding zone 57b are different from those used to heat the first food holding zone 57a, the second temperature of the second food holding zone 57b is capable of being independently set to be different from the first temperature of the first food holding zone 57a. Suitable heating elements are illustrated with respect to the embodiment shown in FIGS. 4A, 4B, and 5. This can be particularly useful for restaurants during lower demand times (as fewer food holding bins are needed to hold larger numbers of different food items than previously) and also for smaller restaurants and retail operations (as space constraints can be met more easily).

[0011] In one embodiment of the bin 10, all of the compartments 50 are heated. In another embodiment, some compartments 50 may be refrigerated while other compartments 50 are heated. In yet another embodiment, one or more compartments 50 can be selectively heated or refrigerated.

[0012] The bin 10 includes a chassis 15. As illustrated, the chassis 15 includes a top panel 20, a bottom panel 25, a left-side panel 30, a right side panel 35, an open front face 40 and an open rear face 45. When the rear face 45 is open and uncovered, food items can be inserted by a first operator responsible for initial food preparation into one of the faces 40, 45 and passed through to and removed from the other of the faces 40, 45 by a second operator responsible for final food preparation, for example, a second operator responsible for packaging and customization of a

food product for serving to the ultimate customer. In another embodiment, the rear face 45 may be “closed” and provided by a rear panel such that access into the bin 10 is only provided by the open front face 40. The panels may be insulated to reduce heat transfer between the interior of the bin 10 and the atmosphere surrounding the bin 10.

[0013] The bin 10 illustrated in FIG. 1 is sized, shaped and arranged to have two compartments 50, however, the bin 10 can have any number of compartments 50, including a single compartment 50. For clarity, the two compartments 50 depicted in FIGS. 1-3 are denominated using the letters A and B. The “A” compartment is the top or uppermost compartment 50 and the “B” compartment is the bottom or lower-most compartment 50.

[0014] In the embodiment illustrated in FIG. 1, the top or “A” compartment is defined by the left and right sidewalls 30 and 35, the chassis top panel 20 and a first or upper-most shelf 52. Compartment “B” is defined by the two sidewalls 30 and 35, the first or upper-most shelf 52, and the chassis bottom panel 25. In bin embodiments having only one compartment 50, the single compartment is defined by opposing, left and right sidewalls 30 and 35, a chassis top panel 20 and a chassis bottom panel 25. For brevity, bin construction and operation is described with regard to a bin 10 having two compartments 50 in FIGS. 1-3. However, other embodiments may have more than two compartments 50 or less than two compartments 50. For example, the embodiments illustrated in FIGS. 4A, 4B, 5, and 6 have four compartments 50. Again, other configurations are also possible.

[0015] The shelf 52, which partially defines the compartments 50, is planar or at least substantially planar and supported in the chassis 15 at opposing side ends by the two chassis side walls 30 and 35. The shelf 52 includes a planar and continuous top surface, which forms a planar and continuous bottom surface 53 of the upper compartment 50. The planar and continuous bottom surface 53 of the upper compartment 50 is configured to support food items (as used herein, the term “food item” includes but is not limited to containers or trays containing food products such as cooked protein patties, fried foods, and the like). In the illustrated embodiment, food items can be placed onto the planar and continuous bottom surface 53 and removed from the planar and continuous bottom surface 53 through the open front face 40 or through the open rear face 45. Because the bottom surface 53 is planar and continuous and substantially free of

any dividing walls or other structure between the holding zones 57a, 57b, and more particularly between the food holding bays 51a, 51b, 51c, and 51d, cleaning of the bottom surface 53 can be easily accomplished.

[0016] A face plate or bezel 92 is generally attached to the front of the chassis 15. For example, the bezel can be attached to the sidewalls 30 and 35 of the chassis 15 so as to be disposed underneath a top surface of the shelf 52. In bin embodiments having only one compartment 50, the bezel 92 may be attached to either of the chassis top or bottom panels 20, 25 of the bin 10. In the illustrated embodiment of FIGS. 1-3, the bezel 92 is set forward from the shelf 52 by a space 55. The space 52 forms a slot in which one or more latches 23 translate and/or rotate from a locked/default position to an unlocked position so as to release lids held in lid holding ledges 31 as will be discussed further below.

[0017] The bezels 92 may include information displays and/or controls, which are collectively identified by reference numeral 93. Although the chassis 15 can include panels concealing the heat generating devices located within a shelf, the bezel 92 also can conceal heating elements, which are located within the shelf 52, such that a separate panel is not present.

[0018] Each food holding bay 51a, 51b, 51c, 51d may include a dedicated display and/or control 93a, 93b, 93c, 93d, respectively. While each dedicated display and/or control 93a, 93b, 93c, 93d may display and/or control the temperature within individual food holding bays 51a, 51b, 51c, 51d, the food holding bays within a particular food holding zone (51a and 51b within 57a; 51c and 51d within 57b) have the same temperature setting. The dedicated display and/or controls 93a, 93b, 93c, 93d, may also display additional information about the food item stored in the food holding bay 51a, 51b, 51c, 51d. For example, while the temperature in the first food holding bay 51a and the second food holding bay 51b is the same (because both food holding bays 51a, 51b are located within a single food holding zone 57a), the display and/or control 93a, 93b may indicate that the first food holding bay 51a has a first food item (such as sausage) while the second food holding bay 51b has a second food item (such as eggs). In the embodiment illustrated in FIGS. 1-3, the display and control 93a, 93b, 93c, and 93d can display the particular food item, the temperature setpoint of a respective food holding bay 51a, 51b, 51c, 51d, along with other information about the food item stored in the food holding bay 51a, 51b, 51c, 51d,

- 6 -

such as the food holding bay is ready to receive food items, the food items in the food holding bay should be discarded, the food items in the food holding bay are older and should be used first relative to the same food items contained in another food holding bay, the food items in the food holding bay are newer relative to the same food items contained in another food holding bay such that the food items contained in the other food holding bay should be used first, it is time to cook more food product. Moreover, the heating elements for each food holding zone 57a, 57b can be controlled by the displays and/or controls 93a, 93b, 93c, 93d to maintain the temperature setpoint of the respective food holding zones 57a, 57b. The displays and/or controls 93a, 93b, 93c, 93d may be grouped together (i.e., arranged horizontally beneath the respective food holding bay 51a, 51b, 51c, 51d) in the bezel 92 for a corresponding compartment 50. In the embodiment illustrated in FIGS. 1-3, a single bezel 92 is used to provide the display and/or control elements for two vertically adjacent compartments 50, but of course discrete bezels can also be used. The displays and/or controls 93a, 93b, 93c, 93d thus can provide a user graphical interface to one or more controllers (not shown) for the bin. A temperature control interface panel 95 may also be provided to control the temperatures of the food holding zones 57a, 57b.

[0019] Each food holding bay 51a, 51b, 51c, 51d may be sized to receive an individual food holding tray 27 and lid 21 (see FIG. 2 where the tray 27 is illustrated in broken lines). In order to conveniently store the lid 21, each food holding bay 51a, 51b, 51c, 51d may also include a dedicated lid holding shelf 31 that is sized to receive and store the lid 21 when the lid 21 is desired for use in combination with a food holding tray 27, such as when protein patties are contained within the tray 27. Generally, a top surface 27a of a food holding tray 27, when received in the lid holding shelf 31, is substantially flush with a top surface of the lid holding shelf 31 such that when the tray 27 is disposed in the food holding bay 51c, the tray 27 can be in contact with and engaged by the lid 21 in the lid holding shelf 31 so as to retain moisture within the tray 27-lid 21 assembly. In some embodiments, the lid holding shelf 31 may be provided by formed sheet metal. In other embodiments, the lid holding shelf 31 may be provided by a wire form. Other structures are also possible.

[0020] Adjacent to each lid holding shelf 31 is one or more latches 23 having an open center portion. In the embodiment illustrated in FIGS. 1-3, each food holding zone 57a, 57b includes a

single dedicated latch 23 that selectively secures lids 21 in the food holding shelves 31 in each food holding bay 51a, 51b, 51c, 51d. In the illustrated embodiment, the latches 23 have a round or curved body 29 that is rotatable and/or translatable (because of the open center) about a retaining element such as a pin or screw (not shown). In other embodiments, the latches 23 may have straight or angled outer surfaces that form other shapes, such as a square, a pentagon, a hexagon, or any other polygonal shape. The latches 23 may be disposed adjacent an opening into the food holding compartment 50 above the lid holding shelf 31. In one example, the latches 23 may be captured on a cylindrical retaining element between the chassis 15 and a top of the food holding compartment 50 above the lid holding shelf 31. In other embodiments, one or more washers (not shown), such as metal, nylon, or plastic washers, may be disposed on the cylindrical retaining element to space the latches 23 apart from the bezel 92 and the shelf 52 to prevent metal galling and/or to reduce friction between the latches 23 and the bezel 92 or shelf 52 to ease actuation of the latches 23.

[0021] The round body 29 may be oriented substantially parallel to a front face of the chassis 15 or the bezel 92 in a locked or default position, as illustrated by reference numeral 23a, which prevents inadvertent removal of a lid 21 from the lid holding shelf 31 when a tray 27 is withdrawn. The latch 23 is in its default or locked position simply because of gravity, thus re-positioning the latch to an unlocked state advantageously requires simply overcoming the weight of the latch 23 by translational and/or rotational movement. The round body 29 may be rotated and/or translated upwards relative to the bezel 92 or lid holding shelf 31 from the locked or default position to an unlocked position, as illustrated by the dotted lines referencing latch 23 between food holding bay 51a and food holding bay 51b in FIG. 1; this rotational and/or translational movement of the latch 23 about the retaining element allows facile insertion or removal of a lid 21 to/from the lid holding shelf 31. The round body 29 may be mounted on a retaining element such as a pin or a screw (not shown), which retains the round body 29 and allows the round body 29 to translate along the open center portion and/or to at least partially rotate about the pin when the round body 29 translates. The lid holding shelf 31 also allows the food holding compartment 50 to have the planar and continuous bottom surface 52 by storing the lids 27a in an elevated position, with the lid holding shelf 31 being suspended above the

continuous bottom surface 52, typically by fixedly attaching a base of the shelf to a top surface of the food holding compartment 50 at one or more positions. Such continuous planar and continuous bottom surfaces 52 are much easier to clean than compartmentalized or divided heating chambers. Furthermore, the round body 29 of the latch 23 and the translation/rotation movement of the latch allow easy removal of the lids 27 from the lid holding tray 31 with one hand while positioning the latch 23 to the unlocked position with another hand.

[0022] From a purely functional standpoint, a preferred latch 23 might simply include a locking portion that is able to prevent inadvertent displacement of the lid 21 when the tray 27 is purposefully removed. Thus, a number of different configurations and shapes can be used for the latch 23. The latch 23 illustrated here with the round body 29, on the other hand, has an alternative, ornamental arrangement for the round body 29 in which the edges of the round body 29 include an arc-shaped, curved surface. This illustrated arrangement may add to the cost of manufacture, so the illustrated latch does not provide all of the possible economic advantages that might be derived from the invention. On the other hand, this arrangement is believed to be aesthetically pleasing and is likely to be recognized and relied upon by purchasers to identify the source of the food holding bin.

[0023] FIGS. 4A, 4B, and 5 are perspective views of an alternate embodiment of a multi-zone food holding bin 10, the embodiment of FIGS. 4A, 4B, and 5 including four separate food holding compartments 50. The embodiment of FIGS. 4A, 4B, and 5 is substantially identical to the embodiment of FIGS. 1-3 with the exception that the embodiment of FIGS. 4A, 4B, and 5 includes four food holding compartments 50 instead of two, each food holding compartment 50 including two food holding zones 57a, 57b, and each food holding zone 57a, 57b including a single food holding bay 51a, 51b, respectively. Thus, reference numbers identifying identical elements are the same in FIGS. 1-3 and in FIGS. 4A, 4B, and 5. Moreover, elements not illustrated in one of the embodiments are understood to be present in the other embodiment. For example, the embodiment illustrated in FIGS. 4A, 4B, and 5 includes cut-away views showing internal components that are not visible in FIGS. 1-3. Nevertheless, these internal components are understood to be present in the embodiment illustrated in FIGS. 1-3 as well.

[0024] Similar to the embodiment of FIGS. 1-3, each separate food holding compartment 50 in the food holding bin 10 of FIGS. 4A, 4B, and 5 includes at least two separate food holding zones, a first food holding zone 57a and a second food holding zone 57b. Each food holding zone 57a, 57b is configured to maintain a different temperature. Of course, it is not necessary for the food holding zones 57a, 57b to be operated at different temperatures in practice.

[0025] The bin 10 illustrated in FIG. 4A is sized, shaped and arranged to have four compartments 50, however, bins in accordance with the disclosure can have any number of compartments, including a single compartment.

[0026] In FIG. 4, the first or top compartment is defined by the left and right sidewalls 30 and 35, the chassis top panel 20 and the first or upper-most shelf 52. The second compartment is defined by the two sidewalls 30 and 35, the shelf 52 for the first compartment and the second shelf 52. The third compartment is defined by the two sidewalls 30, 35, the second shelf 52 and the third shelf 52. The fourth compartment is defined by the two sidewalls 30 and 35, the third shelf and the chassis bottom 25.

[0027] The shelves 52, which partially define the compartments 50, are planar or at least substantially planar and supported in the chassis 15 at their opposing side ends by the two chassis side walls 30 and 35. Each shelf 52 forms a planar and continuous top surface, which defines a planar and continuous bottom surface 53 of the compartment 50. The planar and continuous bottom surface 53 of the compartment is configured to support food items (as mentioned above, the term “food item” includes but is not limited to containers or trays containing food products such as cooked protein patties, fried foods, and the like). Food items can be placed onto the planar bottom surface 53 and removed from the planar bottom surface 53 through the open front face 40 or through the open rear face 45.

[0028] Each food holding bay 51a, 51b may include a dedicated display and/or control 93a, 93b, respectively. Each display and/or control 93a, 93b may display the temperature setpoint of a respective food holding bay 51a, 51b, and in the embodiment illustrated in FIGS. 4A, 4B, and 5, the temperature of a respective food holding zone 57a, 57b. Moreover, each display and/or control 93a, 93b may control the respective heating elements that maintain the temperature

setpoint of the respective food holding zones 57a, 57b. The displays and/or controls 93a, 93b may be grouped together (i.e., arranged horizontally beneath the respective food holding bay 51a, 51b) in the bezel 92 for a corresponding compartment 50. In the embodiment illustrated in FIGS. 4A, 4B, and 5, a single bezel 92 is used to provide the display and/or control elements for a single compartment 50. The displays and/or controls 93a, 93b can provide a graphical user interface to one or more controllers (not shown) for the bin 10.

[0029] Bin 10 control and control of the food holding zone 51 temperature is effectuated in part by using one or more microcontrollers or microprocessors 97 in combination with temperature sensors 99. US 2011-0114624 A1 entitled “Food Holding Cabinet Power Supplies with Downloadable Software,” the entirety of which is hereby incorporated by reference herein, discloses among other things, apparatuses and methods by which compartments of a food holding bin can be controlled using microprocessors having downloadable software. Compartment temperature control is preferably effectuated using a semiconductor temperature sensor, thermally coupled to each food holding zone 51 and electrically connected to a processor, such as those disclosed in US 2011-0114624 A1.

[0030] A semiconductor apparatus and method for measuring temperature of a plate or shelf in a food holding bin is disclosed in U.S. pat. No. 8,247,745, which is entitled “Temperature Sensor for a Food Holding Cabinet” the entirety of which is hereby incorporated by reference herein.

[0031] The shelf 52 includes a lower heating element 67 for the first food holding zone 57a in a first or top food holding compartment 50, and an upper heating element 65 for a second food holding zone 57b in a second or lower food holding compartment 50, directly below the first food holding compartment 50. While the first heating element 67 is illustrated as providing heat to the upper first food holding zone 57a (from below) and the second heating element 65 is illustrated as providing heat to the lower first food holding zone 57a (from above), heating elements that are not shown include at least a heating element that provides heat to the upper first food holding zone 57a from above and another heating element that provides heat to the lower first food holding zone 57a from below. Additionally, the second food holding zones 57b, which are adjacent to the first food holding zones 57a, are heated in the same way as the first food holding zones 57a, but with independent heating elements. The heating elements of the second

food holding zones 57b are independently controllable from the heating elements of the first food holding zones 57a. Referring to the inset FIG. 4B, the shelf 52 includes an upper thermally conductive plate, which forms the continuous planar bottom surface 53 of the first (or upper) food holding compartment 50 and a lower thermally conductive plate, which forms a continuous planar upper surface 54 of the second (or lower) food holding compartment 50. The planar bottom surface 53 and the planar upper surface 54 are spaced apart from each other by a distance sufficient to accommodate the inclusion of at least two heating elements, which are illustrated in the figures as the separate first heating element 67 and the separate second heating element 65, respectively. Again, the temperature of each food holding zone is controlled by independently controllable heating elements. Insulative materials may be provided between the first heating element 67 and the second heating element 65 to provide better thermal control over the food holding zones 57a, 57b. The first heating element 67 is a lower heating element for the upper food holding compartment 50 and the second heating element 65 is an upper heating element for the lower food holding compartment 50.

[0032] The continuous planar bottom surface 53 of the top food holding compartment 50 and the continuous planar upper surface 54 of the bottom food holding compartment are preferably made of aluminum, between about one-eighth and about one-quarter inch-thick. Alternate embodiments of the shelf 52 may use a thermally-conductive panel made of glass-ceramic or an ultra-low expansion glass for one or both of the lower surface 53 and the upper surface 54. Glass-ceramics and ultra-low expansion glass are considered herein to be “good” thermal conductors in that their conduction of heat energy is localized. Such materials also make excellent shelves for a heated, multi-zone food holding bin because they permit localized areas of a shelf to be heated to a first temperature, without having the entire shelf reach the same temperature.

[0033] The first heating element 67 is disposed between the planar bottom surface 53 and the planar upper surface 54 and the first heating element 67 is in thermal communication with the planar bottom surface 53. The first heating element 67 may be mechanically attached to the planar bottom surface 53 by a thermally-conductive adhesive, in one embodiment. The first heating element 67 may also be attached to the planar bottom surface 53 by brackets or clamps.

[0034] The second heating element 65 is disposed between the planar bottom surface 53 and the planar upper surface 54 and the second heating element 65 is in thermal communication with the planar upper surface 54. The second heating element 65 may be mechanically attached to the planar upper surface 54 by a thermally-conductive adhesive, in one embodiment. The second heating element 65 may also be attached to the planar upper surface 54 by brackets or clamps.

[0035] In the embodiment illustrated in FIGS. 4A, 4B, and 5, the first heating element 67 can be located above the second heating element 65 but in thermal communication with the planar bottom surface 53 such that when the temperature of the first heating element 67 rises, it provides heat energy into the planar bottom surface 53 in a region around the first heating element 67, and more specifically, within the first food holding zone 57a of the first or top food holding compartment 50. Thermally insulating the first heating element 67 from the planar upper surface 54 and thermally insulating the second heating element 65 from the planar bottom surface 53, enables the first heating element 67 to provide a first amount of heat energy into the planar bottom surface 53 (and thus into the first food holding zone 57a of the upper food holding compartment 50), while the second heating element 65 provides a second amount of heat energy into the planar upper surface 54 (and thus into the first food holding zone 57b of the lower food holding compartment 50). In this manner, each food holding zone 57a, 57b may be configured to have an independent and unique temperature profile from top to bottom of the food holding zone 57a, 57b. For example, one food holding zone 57a, 57b may have a temperature profile that generally decreases from top to bottom (i.e., the top of the food holding zone 57a, 57b is hotter than the bottom of the food holding zone 57a, 57b).

[0036] In some embodiments, the second heating element 65 may comprise a radiant heating source that projects radiant heat through the planar upper surface 54 and into the first food holding zone 57a of the lower food holding compartment 50. In other words, in one embodiment, the first heating element 67 provides heat energy into the first food holding zone 57a of the upper food holding compartment 50 through conduction, while the second heating element 65 provides heat energy into the first food holding zone 57a of the lower food holding compartment through radiation. Similarly, a radiant heating element may be provided at a top interior surface of the first or top food holding compartment 50 beneath the chassis top panel 20. In this manner, the

top and bottom of a food product placed into the first food holding zone 57a may absorb different amounts of heat energy, customized depending on the type of food product. Thus, the heat profile in the first food holding zone 57a may be customized vertically as well as differentiated from the heat profile in the second food holding zone 57b. As a result, a single food holding compartment 50 (e.g., the upper compartment in FIGS. 4A and 5) may be customized to store different types of food products in the first food holding zone 57a and the second food holding zone 57b, each food holding zone 57a, 57b having a different temperature profile. As a result, the disclosed food holding bin 10 is flexible in that it can keep multiple different types of food products at their ideal holding temperatures in a single food holding compartment, thus increasing efficiency and adaptability to different food demands.

[0037] Because of this flexibility, it has been found that a food holding bin constructed in accordance with the disclosure can extend the palatability time of a food item by a factor of two or more.

[0038] An alternate embodiment, as illustrated in FIG. 6, may use the thermoelectric effect provided by one or more Peltier devices 80 to heat one or more of the compartments 50.

[0039] The thermoelectric effect is a direct conversion of a temperature difference into an electric voltage and vice versa. When a voltage is applied to a thermoelectric device, a temperature difference is created across the two sides of the device. The temperature difference created in response to an applied voltage is known as the Peltier effect. Devices that produce temperature differences in response to an applied voltage are considered herein to be Peltier devices. A Peltier device 80 is therefore considered herein to be a heat source or heating element.

[0040] Peltier devices have a "cold" side and a "hot" side. The cold side absorbs heat whereas the hot side emits heat. Heat emitted from the hot side includes at least some of the heat absorbed from the cold side. A Peltier device 80 is therefore considered herein to be a solid-state heat pump or heat-sinking device.

[0041] FIG. 6 is a cutaway view of another embodiment of a point-of-use holding bin using Peltier devices to heat the food holding compartments 50. In one embodiment, one or more Peltier devices 80 are "sandwiched" between, and in thermal communication with the bottom

planar surface 53 and the upper planar surface 54 described above. Electrical energy is provided to the Peltier devices 80 through wires 85, under the control of a controller.

[0042] “Sandwiching” the Peltier devices in a shelf 52 as shown in FIG. 6 provides a shelf 52 cold on one side and hot on the other. Such a shelf 52 structure thus enables a dual-mode food holding bin 10 having a “first” food holding compartment 50 that is warm and a vertically adjacent “second” food holding compartment 50 that is cold.

[0043] Temperature control of a thermoelectric, Peltier device 80 may be accomplished by controlling the electric energy provided to the device. Temperature control of one side of the Peltier device 80 can also be effectuated by controlling heat transferred into or out of the opposite side of the device, as described in US 2010-0307168 A1, entitled “Thermo Electric Cooler,” the disclosure of which is incorporated herein by reference in its entirety.

[0044] In another embodiment of a multi-zone food holding bin 10, multiple Peltier devices 80 are mounted between the bottom surface 53 and the upper surface 54 but have only their hot sides thermally coupled to the bottom surface 53 and to the upper surface 54. Air is then moved through the inter-plate space to heat the cool sides of the Peltier devices therein.

[0045] Peltier devices as disclosed herein and similar heat transfer devices are thermally coupled to the shelf 52, preferably by way of mechanical attachment to at least one of the plates that form the lower planar surface 53 and the upper planar surface 54. Mechanical attachment and the resultant thermal coupling is preferably accomplished by a thermally-conductive adhesive, however, clamps that are attached to a plate by screws driven into a plate can also be used.

[0046] The shelves are mechanically coupled to the side panels 30 and 35. The side panels are also preferably made from thermally-conductive material such as aluminum. Thermally coupling a heat transfer device to one or more plates that comprise a shelf therefore also thermally couples the heat transfer device to the side walls and thus to the compartment. Heat transfer devices coupled to a shelf are therefore also thermally coupled to the corresponding compartment.

[0047] While the temperature of a Peltier device can be controlled by controlling the heat dissipated from the hot side and/or the heat absorbed into the cold side, bin embodiments

disclosed herein preferably control compartment temperature using one or more semiconductor temperature sensors, thermally coupled to one or more of the thermally-conductive structures that comprise a compartment. Bin embodiments disclosed herein preferably use a semiconductor temperature sensor that is directly coupled and therefore thermally coupled to the heated surfaces 53 and/or 54 provided by the shelves 52.

[0048] Semiconductor temperature sensors used in preferred embodiments disclosed herein are disclosed in U.S. Pat. No. 8,247,745, which is entitled “Temperature Sensor for a Food Holding Cabinet” the entirety of which is hereby incorporated by reference herein, especially the teachings of the structure and use of a semiconductor temperature sensor.

[0049] Thus, suitable heating elements for use in accordance with the disclosure include electrically-resistive heating elements, such as heated coils, radiant heating elements that provide heat energy via radiation, and devices and ancillary equipment that provide heat to a working fluid. As described above, Peltier devices may also be used as heating elements in accordance with the disclosure.

[0050] The foregoing description is for purposes of illustration only and not for purposes of limitation. The true scope of the invention is set forth by the appended claims.

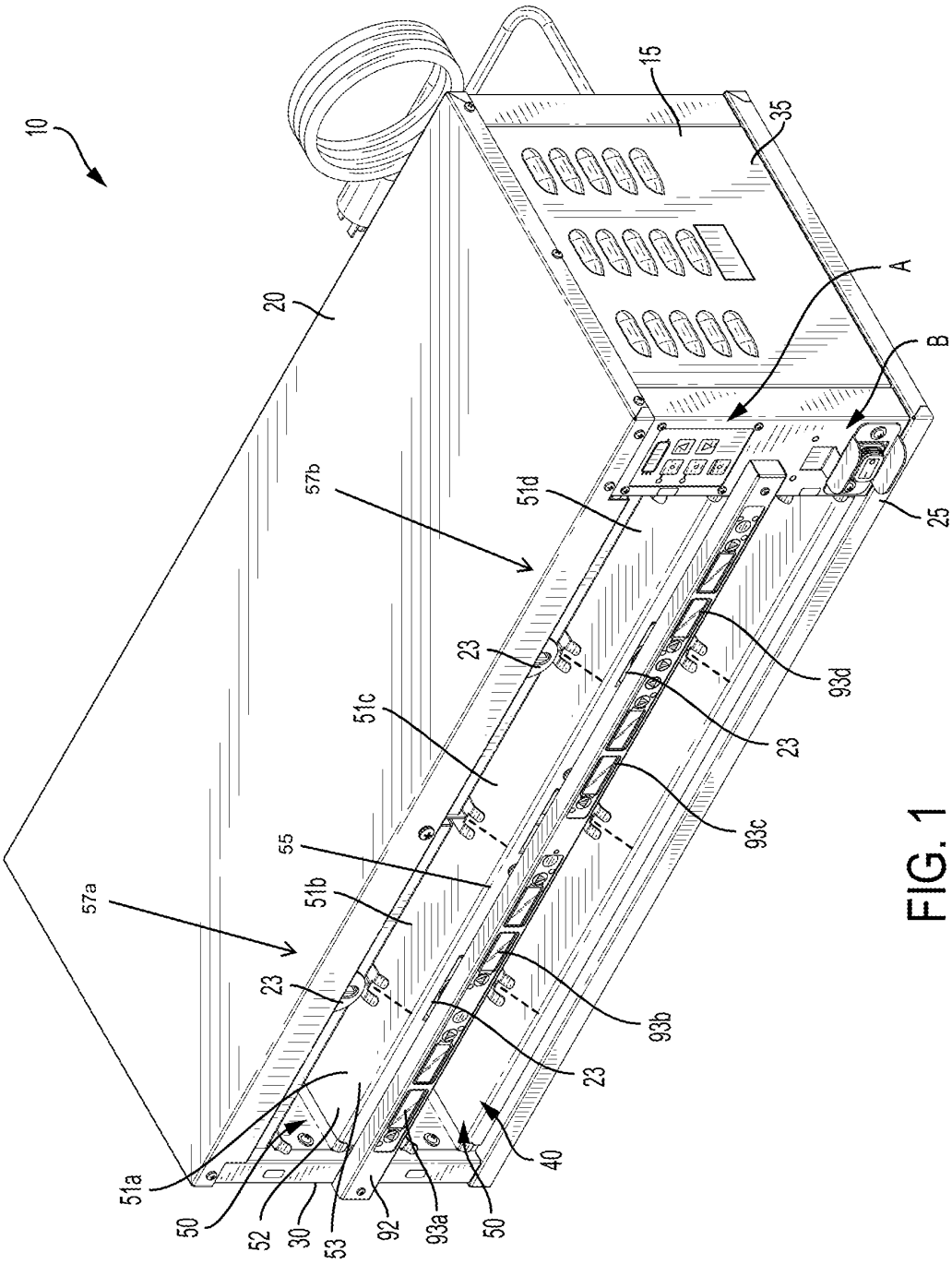


FIG. 1

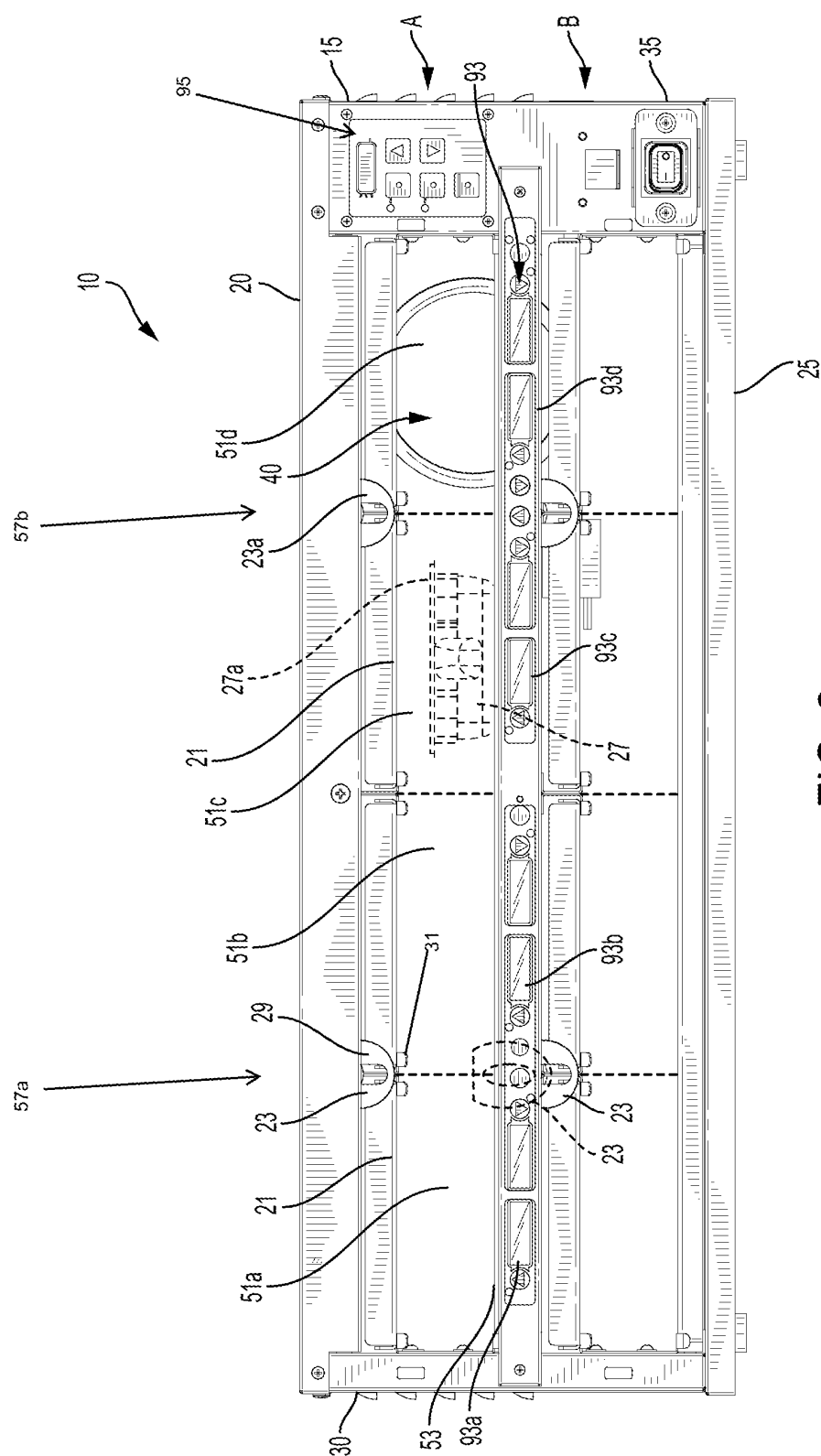


FIG. 2

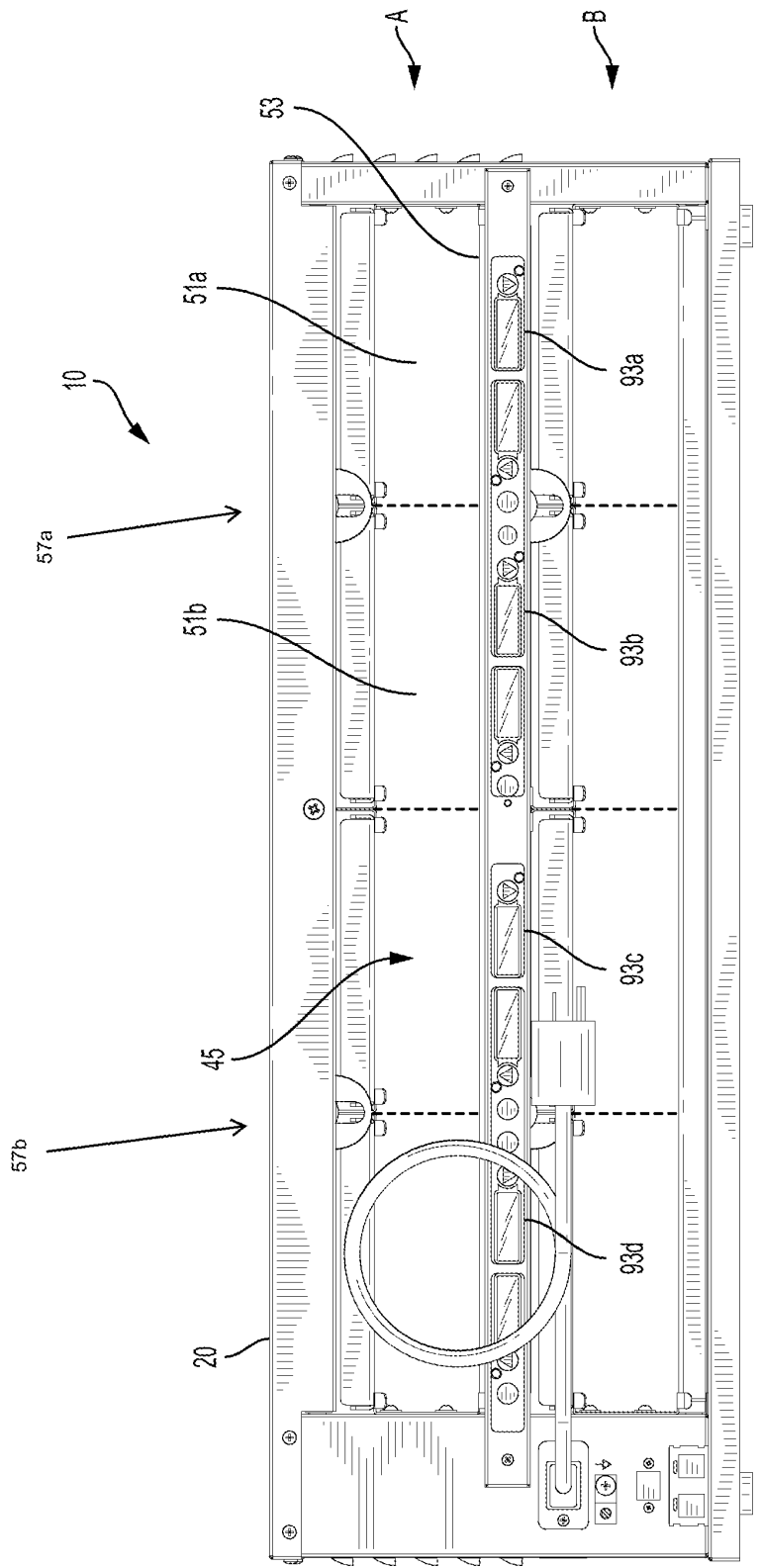


FIG. 3

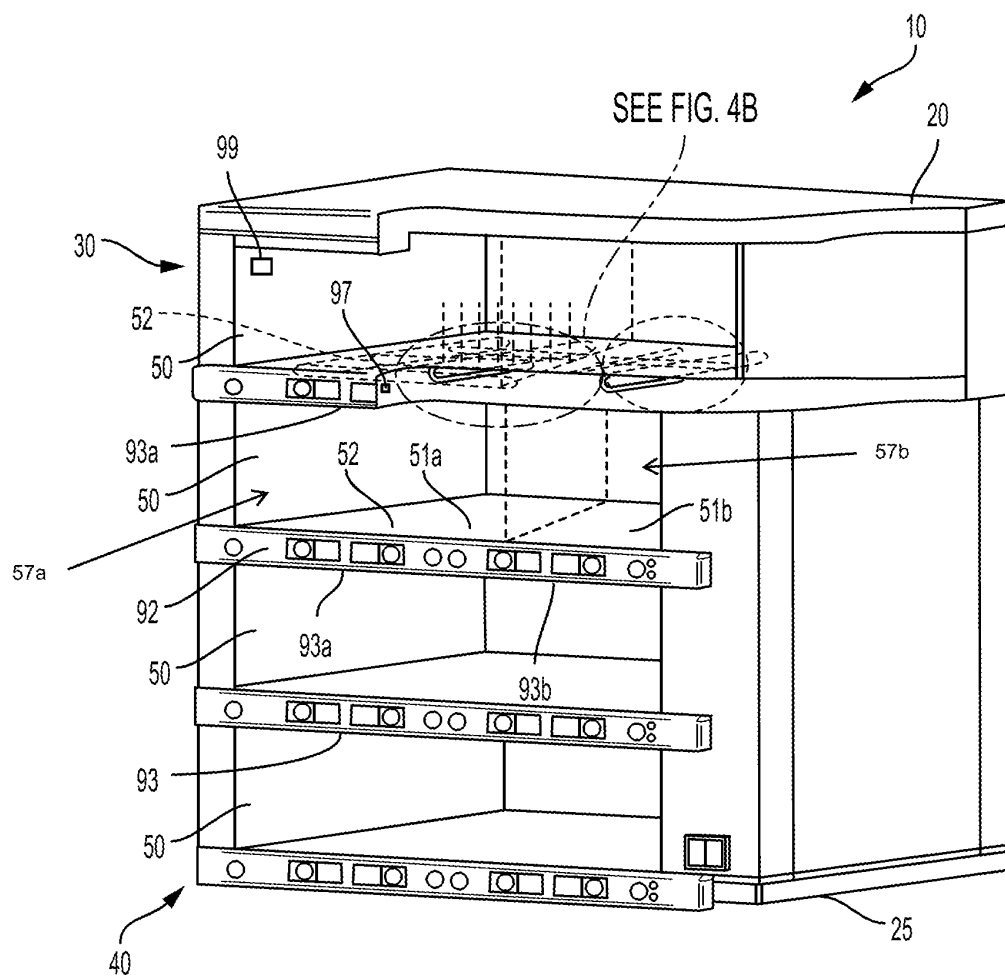


FIG. 4A

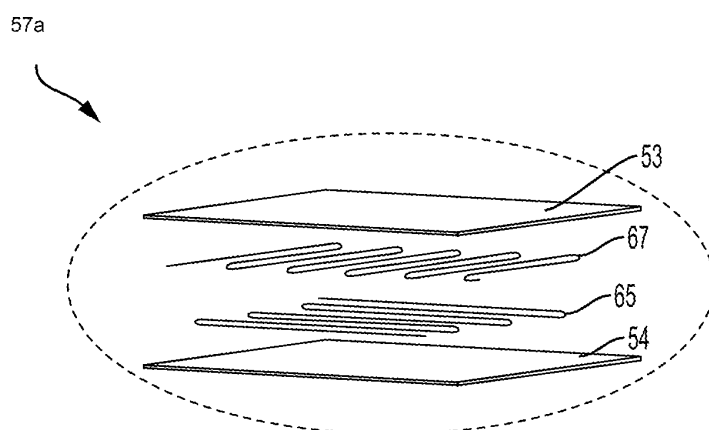


FIG. 4B

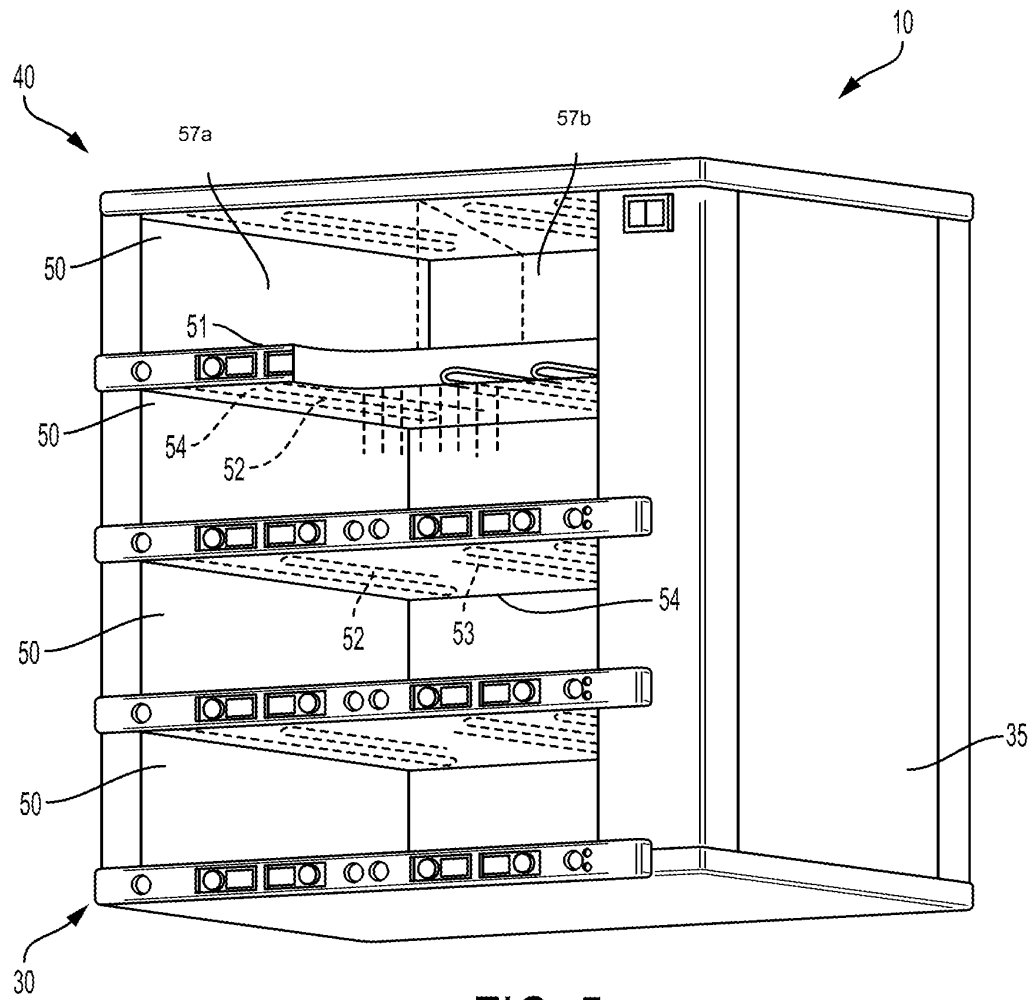
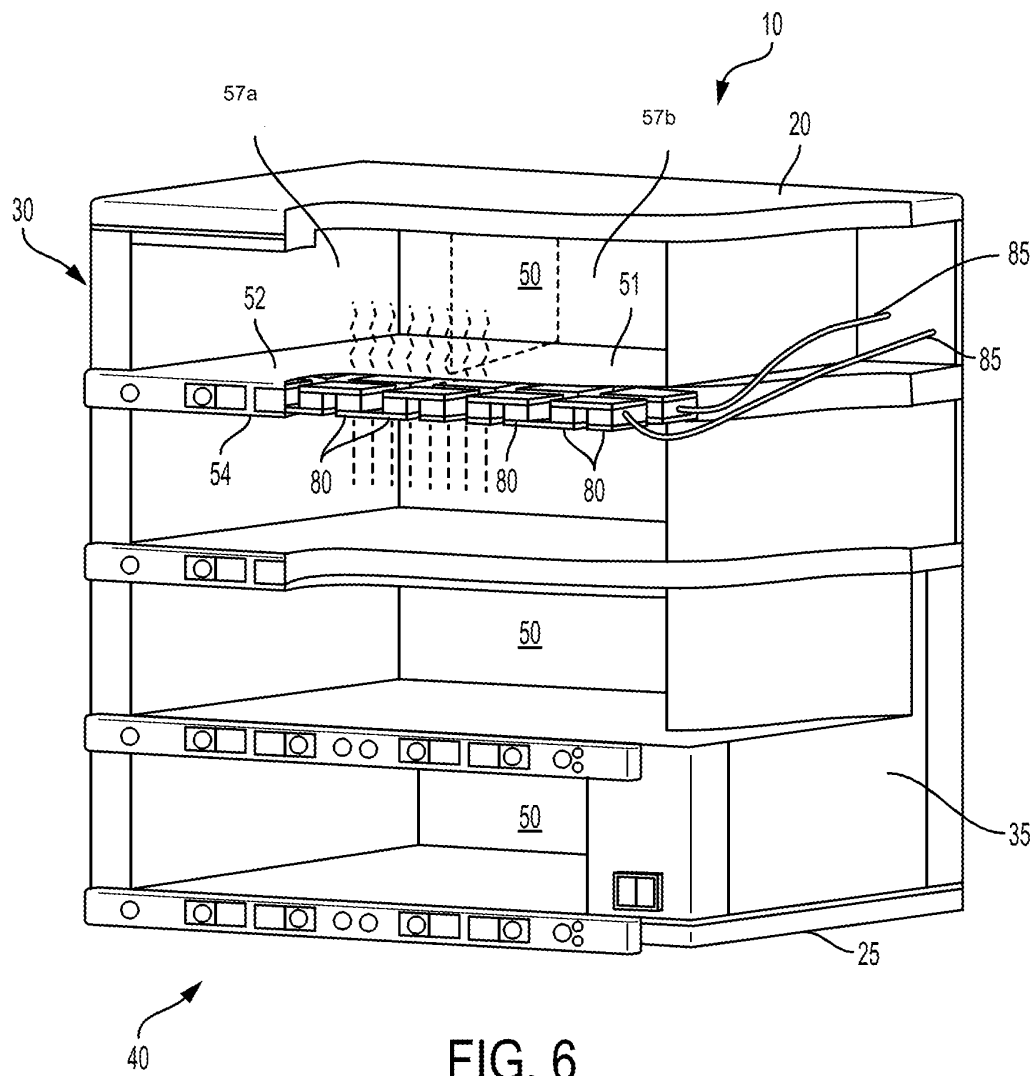


FIG. 5



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Kyle Thomas Kestner et al.

Continuation of USSN 15/984,760

Confirmation No.: Not Yet Assigned

Filed: Concurrently Herewith

Art Unit: Not Yet Assigned

For: MULTI-ZONE FOOD HOLDING BIN

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97, and 1.98, the attention of the United States Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of the above-identified application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

Applicant encloses herewith a completed Form PTO SB08 listing documents for the examiner's consideration. The applicant respectfully requests that all of the listed documents, including those cited in the parent application, be expressly considered. Accordingly, entry and consideration of all of the listed documents are respectfully solicited.

Copies of the listed U.S. Patent and U.S. Patent publication documents are not enclosed. In accordance with 37 C.F.R. §1.98(d), copies of the listed non-patent literature and foreign patent documents are not enclosed because they were previously cited by or submitted to the Patent Office in a prior application (U.S. Patent Application No. 15/984,760) upon which applicant relies for an earlier effective filing date under 35 U.S.C. §120.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 13-2855, under Order No. 29178/50736CON1.

Dated: May 3, 2019

Respectfully submitted,

By /Andrew M. Lawrence/
Andrew M. Lawrence
Registration No.: 46,130
MARSHALL, GERSTEIN & BORUN LLP
233 S. Wacker Drive
6300 Willis Tower
Chicago, Illinois 60606-6357
(312) 474-6300
Attorney for Applicant