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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/988,854	11/17/2022	JASON BRENDEN	58557	1045
40158 7590 10/11/2023 WOODS FULLER SHULTZ & SMITH P.C. ATTN: JEFFREY A. PROEHL P.O. BOX 5027 SIOUX FALLS, SD 57117			EXAMINER BERRY JR, WILLIE WENDELL	
			ART UNIT 3652	PAPER NUMBER
			MAIL DATE 10/11/2023	DELIVERY MODE PAPER

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.



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APPLICATION NO.	ISSUE DATE	PATENT NO.
17/988,854	10-Oct-2023	11780689

WOODS FULLER SHULTZ & SMITH P.C.
ATTN: JEFFREY A. PROEHL
P.O. BOX 5027
SIOUX FALLS, SD 57117

EGRANT NOTIFICATION

Your electronic patent grant (eGrant) is now available, which can be accessed via Patent Center at <https://patentcenter.uspto.gov>

The electronic patent grant is the official patent grant under 35 U.S.C. 153. For more information, please visit <https://www.uspto.gov/electronicgrants>



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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/988,854	10/10/2023	11780689	58557	1045

40158 7590 09/20/2023
WOODS FULLER SHULTZ & SMITH P.C.
ATTN: JEFFREY A. PROEHL
P.O. BOX 5027
SIOUX FALLS, SD 57117

ISSUE NOTIFICATION

The projected patent number and issue date are specified above. The patent will issue electronically. The electronically issued patent is the official patent grant pursuant to 35 U.S.C. § 153. The patent may be accessed on or after the issue date through Patent Center at <https://patentcenter.uspto.gov/>. The patent will be available in both the public and the private sides of Patent Center. Further assistance in electronically accessing the patent, or about Patent Center, is available by calling the Patent Electronic Business Center at 1-888-217-9197.

The USPTO is implementing electronic patent issuance with a transition period, during which period the USPTO will mail a ceremonial paper copy of the electronic patent grant to the correspondence address of record. Additional copies of the patent (i.e., certified and presentation copies) may be ordered for a fee from the USPTO's Certified Copy Center at <https://certifiedcopycenter.uspto.gov/index.html>. The Certified Copy Center may be reached at (800)972-6382.

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 0 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 Center (<https://patentcenter.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 Patents Stakeholder Experience (OPSE), Stakeholder Support Division (SSD) at (571)-272-4200.

INVENTOR(s) (Please see PATENT CENTER site <https://patentcenter.uspto.gov> for additional inventors):

JASON BRENDEN, ELK POINT, SD;
TYLER DEWITT, VERMILLION, SD;

APPLICANT(s) (Please see PATENT CENTER site <https://patentcenter.uspto.gov> for additional applicants):

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.

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 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. **Because electronic patent issuance may occur shortly after issue fee payment, any desired continuing application should preferably be filed prior to payment of this issue fee in order not to jeopardize copendency.**

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

40158 7590 08/21/2023
WOODS FULLER SHULTZ & SMITH P.C.
ATTN: JEFFREY A. PROEHL
P.O. BOX 5027
SIOUX FALLS, SD 57117

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.
17/988,854	11/17/2022	JASON BRENDEN	58557	1045

TITLE OF INVENTION: AGGREGATE TRANSFERRING SYSTEM

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$480	\$0.00	\$0.00	\$480	11/21/2023

EXAMINER	ART UNIT	CLASS-SUBCLASS
BERRY JR, WILLIE WENDELL	3652	414-398000

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/AIA/122 or PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/AIA/47 or PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Jeffrey A. Proehl
2 Woods, Fuller, Shultz
& Smith, PC
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
Masaba, Inc.

(B) RESIDENCE: (CITY and STATE OR COUNTRY)
Vermillion, South Dakota

Reel/Frame 064478/0509

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

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

☒ Electronic Payment via Patent Center or 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 Jeffrey A. ProehlDate 9/29/2023Typed or printed name Jeffrey A. ProehlRegistration No. 35987

Electronic Patent Application Fee Transmittal				
Application Number:		17988854		
Filing Date:		17-Nov-2022		
Title of Invention:		AGGREGATE TRANSFERRING SYSTEM		
First Named Inventor/Applicant Name:		JASON BRENDEN		
Filer:		Jeffrey A. Proehl/Wanita Jacobsma		
Attorney Docket Number:		58557		
Filed as Small Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
UTILITY APPL ISSUE FEE	2501	1	480	480

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				480

Electronic Acknowledgement Receipt	
EFS ID:	48504633
Application Number:	17988854
International Application Number:	
Confirmation Number:	1045
Title of Invention:	AGGREGATE TRANSFERRING SYSTEM
First Named Inventor/Applicant Name:	JASON BRENDEN
Customer Number:	40158
Filer:	Jeffrey A. Proehl/Wanita Jacobsma
Filer Authorized By:	Jeffrey A. Proehl
Attorney Docket Number:	58557
Receipt Date:	29-AUG-2023
Filing Date:	17-NOV-2022
Time Stamp:	09:55:46
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$480
RAM confirmation Number	E20238S056148118
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

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)	05349695.PDF	213088	no	1
			be0423ac7e9e8d3c5fe170f61802846656a1e5d6		
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	37989	no	2
			934a95f5c4fa500db856ce361836b67d0f35ecda		
Warnings:					
Information:					
Total Files Size (in bytes):			251077		
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.					



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NOTICE OF ALLOWANCE AND FEE(S) DUE

40158 7590 08/21/2023
WOODS FULLER SHULTZ & SMITH P.C.
ATTN: JEFFREY A. PROEHL
P.O. BOX 5027
SIOUX FALLS, SD 57117

EXAMINER

BERRY JR, WILLIE WENDELL

ART UNIT

PAPER NUMBER

3652

DATE MAILED: 08/21/2023

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/988,854	11/17/2022	JASON BRENDEN	58557	1045

TITLE OF INVENTION: AGGREGATE TRANSFERRING SYSTEM

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$480	\$0.00	\$0.00	\$480	11/21/2023

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 40% the amount of undiscounted fees, and micro entity fees are 20% the amount of undiscounted 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. 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 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. **Because electronic patent issuance may occur shortly after issue fee payment, any desired continuing application should preferably be filed prior to payment of this issue fee in order not to jeopardize copendency.**

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40158 7590 08/21/2023
WOODS FULLER SHULTZ & SMITH P.C.
ATTN: JEFFREY A. PROEHL
P.O. BOX 5027
SIOUX FALLS, SD 57117

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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.
17/988,854	11/17/2022	JASON BRENDEN	58557	1045

TITLE OF INVENTION: AGGREGATE TRANSFERRING SYSTEM

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$480	\$0.00	\$0.00	\$480	11/21/2023

EXAMINER	ART UNIT	CLASS-SUBCLASS
BERRY JR, WILLIE WENDELL	3652	414-398000

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/AIA/122 or PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/AIA/47 or PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

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

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document 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)

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

☐ Electronic Payment via Patent Center or 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
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/988,854	11/17/2022	JASON BRENDEN	58557	1045
40158 7590 08/21/2023 WOODS FULLER SHULTZ & SMITH P.C. ATTN: JEFFREY A. PROEHL P.O. BOX 5027 SIOUX FALLS, SD 57117			EXAMINER BERRY JR, WILLIE WENDELL	
			ART UNIT 3652	PAPER NUMBER
DATE MAILED: 08/21/2023				

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. 17/988,854	Applicant(s) BRENDEN et al.	
	Examiner WILLIE W BERRY JR	Art Unit 3652	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 8/4/23.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

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

3. ☒ The allowed claim(s) is/are 1-25 . As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
Certified copies:
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
* Certified copies not received: _____.

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

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

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

Attachment(s)

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

/SAUL RODRIGUEZ/ Supervisory Patent Examiner, Art Unit 3652	
--	--

<i>Index of Claims</i> 	Application/Control No. 17/988,854	Applicant(s)/Patent Under Reexamination BRENDEN et al.
	Examiner WILLIE W BERRY JR	Art Unit 3652

✓	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	05/06/2023	07/21/2023	08/08/2023						
	1	✓	✓	=						
	2	✓	✓	=						
	3	✓	✓	=						
	4	✓	✓	=						
	5	✓	✓	=						
	6	✓	✓	=						
	7	✓	✓	=						
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	22	✓	✓	=						
	23	✓	✓	=						
	24	✓	✓	=						
	25	✓	✓	=						

<i>Search Notes</i> 	Application/Control No. 17/988,854	Applicant(s)/Patent Under Reexamination BRENDEN et al.
	Examiner WILLIE W BERRY JR	Art Unit 3652

CPC - Searched*		
Symbol	Date	Examiner
B65G 2201/042	05/05/2023	WB
B65G 67/08	05/05/2023	WB

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

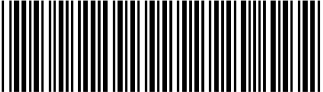
US Classification - Searched*			
Class	Subclass	Date	Examiner

* 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
Inventor's Search	05/05/2023	WB
Assignee Search - No Data	05/05/2023	WB
Updated Search	07/21/2023	WB

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner
All US PGPUB classes	Please see interference claim text search printout	08/08/2023	WB

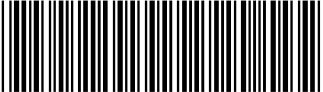
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Issue Classification 	Application/Control No. 17/988,854	Applicant(s)/Patent Under Reexamination BRENDEN et al.
	Examiner WILLIE W BERRY JR	Art Unit 3652

CPC						
Symbol					Type	Version
B65G	/	67	/	08	F	2013-01-01
B65G	/	2201	/	042	A	2013-01-01

CPC Combination Sets					
Symbol				Type	Version
	/		/		

/WILLIE W BERRY JR/ Examiner, Art Unit 3652 (Assistant Examiner)	08 August 2023 (Date)	Total Claims Allowed: 25	
/SAUL RODRIGUEZ/ Supervisory Patent Examiner, Art Unit 3652 (Primary Examiner)	11 August 2023 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1A

Issue Classification 	Application/Control No. 17/988,854	Applicant(s)/Patent Under Reexamination BRENDEN et al.
	Examiner WILLIE W BERRY JR	Art Unit 3652

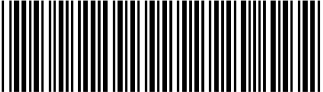
INTERNATIONAL CLASSIFICATION			
CLAIMED			
B65G		67	08

NON-CLAIMED			

US ORIGINAL CLASSIFICATION	
CLASS	SUBCLASS
414	398

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

/WILLIE W BERRY JR/ Examiner, Art Unit 3652 (Assistant Examiner)	08 August 2023 (Date)	Total Claims Allowed: 25	
/SAUL RODRIGUEZ/ Supervisory Patent Examiner, Art Unit 3652 (Primary Examiner)	11 August 2023 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1A

Issue Classification 	Application/Control No. 17/988,854	Applicant(s)/Patent Under Reexamination BRENDEN et al.
	Examiner WILLIE W BERRY JR	Art Unit 3652

☐ 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	1	17	10	24	19										
2	2	16	11	19	20										
3	3	6	12	20	21										
12	4	7	13	22	22										
13	5	8	14	23	23										
14	6	9	15	21	24										
15	7	10	16	25	25										
4	8	11	17												
5	9	18	18												

/WILLIE W BERRY JR/ Examiner, Art Unit 3652 (Assistant Examiner)	08 August 2023 (Date)	Total Claims Allowed: 25	
/SAUL RODRIGUEZ/ Supervisory Patent Examiner, Art Unit 3652 (Primary Examiner)	11 August 2023 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1A

Appln. No. 17/988,854
Amendment dated August 4, 2023
reply to office action dated July 25, 2023

OK TO ENTER: /W.W.B/
08/08/2023

Attorney's Docket No. 58557

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re Patent Application of JASON BRENDEN et al.)
Serial No.: 17/988,854)
Filed: November 17, 2022)
For: AGGREGATE TRANSFERRING SYSTEM)
Examiner: (unassigned))
Group Art Unit: (unassigned))

Mail Stop: Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO OFFICE ACTION

Responsive to the Office Action mailed July 25, 2023, please consider the following:

Amendments to the Specification: None.

Amendments to the Claims: None.

Amendments to the Drawings: None.

Remarks/Arguments begin on page 2 of this paper.

PE2E SEARCH - Search History (Prior Art)

There are no Prior Art searches to show.

PE2E SEARCH - Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
N1	0	(frame AND base AND unloader AND conveyor AND deployable AND storage AND deploy AND position AND transport AND operational AND elevating AND "conveyor extension" AND inlet AND outlet AND lowered AND raised AND inboard AND outboard AND segment AND pivot).clm	(US-PGPUB)	OR	ON	ON	2023/08/08 11:22 AM
N2	0	(frame AND base AND unloader AND conveyor AND deployable AND storage AND deploy AND position AND transport AND operational AND elevating AND "conveyor extension" AND inlet AND outlet AND lowered AND raised AND inboard AND outboard AND segment AND pivot).clm.	(US-PGPUB)	OR	ON	ON	2023/08/08 11:23 AM
N3	0	(frame AND base AND unloader AND conveyor AND deployable AND storage AND deploy AND position AND elevating AND "conveyor extension" AND inlet AND outlet AND vertical AND axes AND inboard AND outboard AND segment AND pivot).clm	(US-PGPUB)	OR	ON	ON	2023/08/08 11:36 AM
N4	0	(frame AND base AND unloader AND conveyor AND deployable AND storage AND deploy AND position AND	(US-PGPUB)	OR	ON	ON	2023/08/08 11:36 AM

		elevating AND "conveyor extension" AND inlet AND outlet AND vertical AND axes AND inboard AND outboard AND segment AND pivot).clm.					
--	--	--	--	--	--	--	--

Appln. No. 17/988,854
Amendment dated August 4, 2023
reply to office action dated July 25, 2023

Attorney's Docket No. 58557

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re Patent Application of JASON BRENDEN et al.)
Serial No.: 17/988,854)
Filed: November 17, 2022)
For: AGGREGATE TRANSFERRING SYSTEM)
Examiner: (unassigned))
Group Art Unit: (unassigned))

Mail Stop: Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO OFFICE ACTION

Responsive to the Office Action mailed July 25, 2023, please consider the following:

Amendments to the Specification: None.

Amendments to the Claims: None.

Amendments to the Drawings: None.

Remarks/Arguments begin on page 2 of this paper.

REMARKS

Reconsideration is respectfully requested.

Status of Claims:

No claims have been cancelled.

No claims have been withdrawn.

No claims have been added.

Therefore, claims 1 through 25 are pending in this application.

The Examiner's objections and/or rejections will be considered in the order of their occurrence in the Office Action.

Part 1 of the Office Action

Claims 1, 4, 5 through 7, and 11 have been provisionally rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1 through 7, 10, and 11 of copending Application No. 17/550,073 (reference application). Although the claims at issue are not identical, they are not considered by the examiner to be patentably distinct from each other.

A terminal disclaimer has been submitted on August 3, 2023, with respect to copending Application No. 17/550,073 via the eTerminal Disclaimer system, which is submitted to overcome the provisional double patenting rejection.

Withdrawal of the double patenting rejection of claims 1, 4, 5 through 7, and 11 is therefore respectfully requested.

Appln. No. 17/988,854
Amendment dated August 4, 2023
reply to office action dated July 25, 2023

CONCLUSION

In light of the foregoing remarks, early consideration and allowance of this application are most courteously solicited.

Respectfully submitted,

WOODS, FULLER, SHULTZ & SMITH P.C.

/Jeffrey A. Proehl/
Jeffrey A. Proehl (Reg. No. 35,987)
Customer No. **40,158**
P.O. Box 5027
Sioux Falls, SD 57117-5027
(605)336-3890 FAX (605)339-3357

Date: August 4, 2023

Electronic Acknowledgement Receipt	
EFS ID:	48394365
Application Number:	17988854
International Application Number:	
Confirmation Number:	1045
Title of Invention:	AGGREGATE TRANSFERRING SYSTEM
First Named Inventor/Applicant Name:	JASON BRENDEN
Customer Number:	40158
Filer:	Jeffrey A. Proehl/Wanita Jacobsma
Filer Authorized By:	Jeffrey A. Proehl
Attorney Docket Number:	58557
Receipt Date:	04-AUG-2023
Filing Date:	17-NOV-2022
Time Stamp:	09:16:01
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
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	Multipart Description/PDF files in .zip description		
	Document Description	Start	End
	Response After Final Action	1	1
	Applicant Arguments/Remarks Made in an Amendment	2	3
Warnings:			
Information:			
Total Files Size (in bytes):		86100	
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.			

Doc Code: DIST.E.FILE Document Description: Electronic Terminal Disclaimer - Filed		PTO/SB/25 U.S. Patent and Trademark Office Department of Commerce	
Electronic Petition Request	TERMINAL DISCLAIMER TO OBTAIN A PROVISIONAL DOUBLE PATENTING REJECTION OVER A PENDING "REFERENCE" APPLICATION		
Application Number	17988854		
Filing Date	17-Nov-2022		
First Named Inventor	JASON BRENDEN		
Attorney Docket Number	58557		
Title of Invention	AGGREGATE TRANSFERRING SYSTEM		
☒ Filing of terminal disclaimer does not obviate requirement for response under 37 CFR 1.111 to outstanding Office Action ☒ This electronic Terminal Disclaimer is not being used for a Joint Research Agreement.			
Owner		Percent Interest	
Masaba, Inc.		100%	
The owner(s) of percent interest listed above 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 Number(s)			
17550073 filed on 12/14/2021 as the term of any patent granted on said reference application may be shortened by any terminal disclaimer filed prior to the grant of any patent on the pending reference application. The owner 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 owner 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 application may be shortened by any terminal disclaimer filed prior to the grant of any patent on the pending reference application," 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.			
☒ Terminal disclaimer fee under 37 CFR 1.20(d) is included with Electronic Terminal Disclaimer request.			

☐ I certify, in accordance with 37 CFR 1.4(d)(4), that the terminal disclaimer fee under 37 CFR 1.20(d) required for this terminal disclaimer has already been paid in the above-identified application.	
Applicant claims the following fee status: ☒ Small Entity ☐ Micro Entity ☐ Regular Undiscounted	
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.	
THIS PORTION MUST BE COMPLETED BY THE SIGNATORY OR SIGNATORIES 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 is of record in this application Registration Number <u>35987</u> ☐ A sole inventor ☐ A joint inventor; I certify that I am authorized to sign this submission on behalf of all of the inventors as evidenced by the power of attorney in the application ☐ A joint inventor; all of whom are signing this request	
Signature	/Jeffrey A. Proehl/
Name	Jeffrey A. Proehl

*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner).
 Form PTO/SB/96 may be used for making this certification. See MPEP § 324.

Electronic Patent Application Fee Transmittal				
Application Number:		17988854		
Filing Date:		17-Nov-2022		
Title of Invention:		AGGREGATE TRANSFERRING SYSTEM		
First Named Inventor/Applicant Name:		JASON BRENDEN		
Filer:		Jeffrey A. Proehl/Wanita Jacobsma		
Attorney Docket Number:		58557		
Filed as Small Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
STATUTORY OR TERMINAL DISCLAIMER	2814	1	170	170
Pages:				
Claims:				
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 (\$)				170

Doc Code: DISQ.E.FILE

Document Description: Electronic Terminal Disclaimer – Approved

Application No.: 17988854

Filing Date: 17-Nov-2022

Applicant/Patent under Reexamination: BRENDEN

Electronic Terminal Disclaimer filed on August 3, 2023

☒ APPROVED

This patent is subject to a terminal disclaimer

☐ DISAPPROVED

Approved/Disapproved by: Electronic Terminal Disclaimer automatically approved by EFS-Web

U.S. Patent and Trademark Office

Electronic Acknowledgement Receipt	
EFS ID:	48390996
Application Number:	17988854
International Application Number:	
Confirmation Number:	1045
Title of Invention:	AGGREGATE TRANSFERRING SYSTEM
First Named Inventor/Applicant Name:	JASON BRENDEN
Customer Number:	40158
Filer:	Jeffrey A. Proehl/Wanita Jacobsma
Filer Authorized By:	Jeffrey A. Proehl
Attorney Docket Number:	58557
Receipt Date:	03-AUG-2023
Filing Date:	17-NOV-2022
Time Stamp:	14:37:12
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$170
RAM confirmation Number	E202383E37109627
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
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Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	37896	no	2
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Warnings:					
Information:					
Total Files Size (in bytes):			81461		
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 NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO.	TOT CLAIMS	IND CLAIMS
17/988,854	11/17/2022	3652	2040	58557	17	1

40158

WOODS FULLER SHULTZ & SMITH P.C.

ATTN: JEFFREY A. PROEHL

P.O. BOX 5027

SIOUX FALLS, SD 57117

CONFIRMATION NO. 1045

REPLACEMENT FILING RECEIPT



0000000059951462

Date Mailed: 07/31/2023

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)

JASON BRENDEN, ELK POINT, SD;
TYLER DEWITT, VERMILLION, SD;

Applicant(s)

JASON BRENDEN, ELK POINT, SD;
TYLER DEWITT, VERMILLION, SD;

Power of Attorney: The patent practitioners associated with Customer Number 40158

Domestic Priority data as claimed by applicant

This application is a CON of 17/550,073 12/14/2021
which claims benefit of 63/223,124 07/19/2021

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: 11/30/2022

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 17/988,854**

Projected Publication Date: Request for Non-Publication Acknowledged

Non-Publication Request: Yes

Early Publication Request: No

**** SMALL ENTITY ****

Title

AGGREGATE TRANSFERRING SYSTEM

Preliminary Class

414

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

page 2 of 4

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).

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/988,854	11/17/2022	JASON BRENDEN	58557	1045
40158 7590 07/25/2023 WOODS FULLER SHULTZ & SMITH P.C. ATTN: JEFFREY A. PROEHL P.O. BOX 5027 SIOUX FALLS, SD 57117			EXAMINER BERRY JR, WILLIE WENDELL	
			ART UNIT 3652	PAPER NUMBER
			MAIL DATE 07/25/2023	DELIVERY MODE PAPER

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.

Office Action Summary	Application No. 17/988,854	Applicant(s) BRENDEN et al.	
	Examiner WILLIE W BERRY JR	Art Unit 3652	AIA (FITF) Status Yes

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

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 6/28/23.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on ____.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ 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.

4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5) ☒ Claim(s) 1-25 is/are pending in the application.
5a) Of the above claim(s) ____ is/are withdrawn from consideration.

6) ☐ Claim(s) ____ is/are allowed.

7) ☒ Claim(s) 1-25 is/are rejected.

8) ☐ Claim(s) ____ is/are objected to.

9) ☐ Claim(s) ____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, 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.

Application Papers

10) ☒ The specification is objected to by the Examiner.

11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12) ☐ 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)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)
Paper No(s)/Mail Date ____.

3) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.

4) ☐ Other: ____.

DETAILED ACTION

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.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Double Patenting

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 § 2146 *et seq.* 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 filing of a terminal disclaimer by itself is not a complete reply to a nonstatutory double patenting (NSDP) rejection. A complete reply requires that the terminal disclaimer be accompanied by a reply requesting reconsideration of the prior Office action. Even where the NSDP rejection is provisional the reply must be complete. See MPEP § 804, subsection I.B.1. For a reply to a non-final Office action, see 37 CFR 1.111(a). For a reply to final Office action, see 37 CFR 1.113(c). A request for reconsideration while not provided for in 37 CFR 1.113(c) may be filed after final for consideration. See MPEP §§ 706.07(e) and 714.13.

The USPTO Internet website contains terminal disclaimer forms which may be used. Please visit www.uspto.gov/patent/patents-forms. The actual 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/apply/applying-online/eterminal-disclaimer.

Claims 1, 4, 5-7 and 11 are provisionally rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-7, 10 and 11 of copending Application No. 17/550,073 (reference application). Although the claims at issue are not identical, they are not patentably distinct from each other because they both disclose similar embodiments of aggregate transferring apparatus.

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

Response to Arguments

Applicant's arguments, see pages 1-3, filed 6/28/23, with respect to 1-25 have been fully considered and are persuasive, but in order for the claims to be placed in patentable condition a terminal disclaimer would need to be filed in reference to copending patent application no. 17/550,073.

Conclusion

THIS ACTION IS MADE FINAL. 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 mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIE WENDELL BERRY JR whose telephone number is (571)272-6191. The examiner can normally be reached Mon. thru Fri. 11 am - 8 pm.

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, Saul Rodriguez can be reached on (571) 272-7097. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of published or unpublished applications may be obtained from Patent Center. Unpublished application information in Patent Center is available to registered users. To file and manage patent submissions in Patent Center, visit: <https://patentcenter.uspto.gov>. Visit <https://www.uspto.gov/patents/apply/patent-center> for more information about Patent Center and <https://www.uspto.gov/patents/docx> for information about filing in DOCX format. For additional questions, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/SAUL RODRIGUEZ/
Supervisory Patent Examiner, Art Unit
3652**

Wbj.

<i>Index of Claims</i> 	Application/Control No. 17/988,854	Applicant(s)/Patent Under Reexamination BRENDEN et al.
	Examiner WILLIE W BERRY JR	Art Unit 3652

✓	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	05/06/2023	07/21/2023						
	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	✓	✓						

<i>Search Notes</i> 	Application/Control No. 17/988,854	Applicant(s)/Patent Under Reexamination BRENDEN et al.
	Examiner WILLIE W BERRY JR	Art Unit 3652

CPC - Searched*		
Symbol	Date	Examiner
B65G 2201/042	05/05/2023	WB
B65G 67/08	05/05/2023	WB

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
Inventor's Search	05/05/2023	WB
Assignee Search - No Data	05/05/2023	WB
Updated Search	07/21/2023	WB

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

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Receipt date: 06/28/2023

17/988,854 - GAU: 3652

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (01-10)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	17988854
	Filing Date	2022-11-17
	First Named Inventor	JASON BRENDEN
	Art Unit	3652
	Examiner Name	BERRY JR., WILLIE WENDELL
	Attorney Docket Number	58557

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	8926252		2015-01-06	MCIVER	
	2	8955264		2015-02-17	EDWARDS	
	3	9499335		2016-11-22	MCIVER	
	4	10300830		2019-05-28	MCIVER	
	5	10406962		2019-09-10	HUGHES	
	6	10625654		2020-04-21	HUGHES	
	7	10836568		2020-11-17	MANAGAN	
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ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /W.W.B/

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
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Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	20140318040		2014-10-30	EDWARDS	
	2	20150086308		2015-03-26	MCIVER	
	3	20170021318		2017-01-26	MCIVER	
	4	20170313499		2017-11-02	HUGHES	
	5	20180297503		2018-10-18	HUGHES	
	6	20190100391		2019-04-04	MANAGAN	
	7	20190248578		2019-08-15	MANAGAN	
	8	20200231378		2020-07-23	LAMBERT	
	9	20210062632		2021-03-04	LAMBERT	
	10	20210214153		2021-07-15	LAMBERT	

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

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Attorney Docket Number	58557

/W.W.B./	11	20220324660	2022-10-13	LAMBERT
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FOREIGN PATENT DOCUMENTS

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

If you wish to add additional Foreign Patent Document citation information please click the Add button.

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No	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, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
	1		

If you wish to add additional non-patent literature document citation information please click the Add button.

EXAMINER SIGNATURE

Examiner Signature	/WILLIE W BERRY JR./	Date Considered	07/21/2023
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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

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

Application Number	17988854
Filing Date	2022-11-17
First Named Inventor	JASON BRENDEN
Art Unit	3652
Examiner Name	BERRY JR., WILLIE WENDELL
Attorney Docket Number	58557

CERTIFICATION STATEMENT

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

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

OR

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



☐ See attached certification statement.

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

A certification statement is not submitted herewith.

SIGNATURE

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

Signature	/Jeffrey A. Proehl/	Date (YYYY-MM-DD)	2023-06-28
Name/Print	Jeffrey A. Proehl	Registration Number	35987

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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

PE2E SEARCH - Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
L6	1097	B65G2201/042.cpc.	(US-PGPUB; USPAT; DERWENT)	OR	ON	ON	2023/07/21 12:34 AM
L7	950	B65G67/08.cpc.	(US-PGPUB; USPAT; DERWENT)	OR	ON	ON	2023/07/21 12:38 AM
L8	19	("10300830" OR "10406962" OR "10625654" OR "10836568" OR "20140318040" OR "20150086308" OR "20170021318" OR "20170313499" OR "20180297503" OR "20190100391" OR "20190248578" OR "20200231378" OR "20210062632" OR "20210214153" OR "20220324660" OR "8926252" OR "8955264" OR "9499335" OR "9663303").pn.	(US-PGPUB; USPAT)	OR	ON	ON	2023/07/21 01:43 AM

PE2E SEARCH - Search History (Interference)

There are no Interference searches to show.

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (01-10)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	17988854
	Filing Date	2022-11-17
	First Named Inventor	JASON BRENDEN
	Art Unit	3652
	Examiner Name	BERRY JR., WILLIE WENDELL
	Attorney Docket Number	58557

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	8926252		2015-01-06	MCIVER	
	2	8955264		2015-02-17	EDWARDS	
	3	9499335		2016-11-22	MCIVER	
	4	10300830		2019-05-28	MCIVER	
	5	10406962		2019-09-10	HUGHES	
	6	10625654		2020-04-21	HUGHES	
	7	10836568		2020-11-17	MANAGAN	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	17988854
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	Examiner Name	BERRY JR., WILLIE WENDELL
	Attorney Docket Number	58557

Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	20140318040		2014-10-30	EDWARDS	
	2	20150086308		2015-03-26	MCIVER	
	3	20170021318		2017-01-26	MCIVER	
	4	20170313499		2017-11-02	HUGHES	
	5	20180297503		2018-10-18	HUGHES	
	6	20190100391		2019-04-04	MANAGAN	
	7	20190248578		2019-08-15	MANAGAN	
	8	20200231378		2020-07-23	LAMBERT	
	9	20210062632		2021-03-04	LAMBERT	
	10	20210214153		2021-07-15	LAMBERT	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	17988854
	Filing Date	2022-11-17
	First Named Inventor	JASON BRENDEN
	Art Unit	3652
	Examiner Name	BERRY JR., WILLIE WENDELL
	Attorney Docket Number	58557

	11	20220324660		2022-10-13	LAMBERT	
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Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ² i	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
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Examiner Initials*	Cite No	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, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
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EXAMINER SIGNATURE			
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Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	17988854
	Filing Date	2022-11-17
	First Named Inventor	JASON BRENDEN
	Art Unit	3652
	Examiner Name	BERRY JR., WILLIE WENDELL
	Attorney Docket Number	58557

CERTIFICATION STATEMENT

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

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

OR

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



✕ See attached certification statement.

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

A certification statement is not submitted herewith.

SIGNATURE

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

Signature	/Jeffrey A. Proehl/	Date (YYYY-MM-DD)	2023-06-28
Name/Print	Jeffrey A. Proehl	Registration Number	35987

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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

Electronic Patent Application Fee Transmittal				
Application Number:		17988854		
Filing Date:		17-Nov-2022		
Title of Invention:		AGGREGATE TRANSFERRING SYSTEM		
First Named Inventor/Applicant Name:		JASON BRENDEN		
Filer:		Jeffrey A. Proehl/Wanita Jacobsma		
Attorney Docket Number:		58557		
Filed as Small Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
SUBMISSION- INFORMATION DISCLOSURE STMT	2806	1	104	104
Total in USD (\$)				104

Electronic Acknowledgement Receipt	
EFS ID:	48223270
Application Number:	17988854
International Application Number:	
Confirmation Number:	1045
Title of Invention:	AGGREGATE TRANSFERRING SYSTEM
First Named Inventor/Applicant Name:	JASON BRENDEN
Customer Number:	40158
Filer:	Jeffrey A. Proehl/Wanita Jacobsma
Filer Authorized By:	Jeffrey A. Proehl
Attorney Docket Number:	58557
Receipt Date:	28-JUN-2023
Filing Date:	17-NOV-2022
Time Stamp:	16:34:39
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$104
RAM confirmation Number	E20236RG36089418
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	05257891.PDF	75055	no	2
			4a016f2126d797bdc9ff8171d35e79aad3155f16		
Warnings:					
Information:					
2	Information Disclosure Statement (IDS) Form (SB08)	05257594.PDF	612683	no	5
			0e1728217f47ed51b6671e1cd84c5e6e367735d1		
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	38013	no	2
			c9aba9877d4a45c631153343cfabbee047847ddc8		
Warnings:					
Information:					
Total Files Size (in bytes):			725751		
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.					

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No. 17/988,854)
First Named Applicant: JASON BRENDEN)
Filed: 2022-11-17)
For: AGGREGATE TRANSFERRING SYSTEM)
TC/A.U.: 3654)
Examiner: BERRY JR., WILLIE WENDELL)

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

Sir:

INFORMATION DISCLOSURE STATEMENT

With regards to the above-identified application, the items of information listed on the enclosed Form PTO/SB/08a are brought to the attention of the Examiner.

A copy of each document or other information listed on the attached Form PTO/SB/08a is provided.

This information is being provided to satisfy the requirements of Rule 56. Consideration of the items listed is formally requested. No representation is made that the items listed in the Form PTO/SB/08a is "prior art" within the meaning of 35 U.S.C. §§102 and 103, and applicant(s) reserve the right, pursuant to 37 C.F.R. § 1.131 or otherwise, to establish that the item(s) or reference(s) are not "prior art." Moreover, Applicants do not represent that a reference has been thoroughly reviewed or that any relevance of any portion of a reference is intended.

This information is being submitted subsequent to the mailing of a first Office Action for the present application. Therefore, the fee under 37 CFR 1.17(p) in the amount of \$104 is required for submission and consideration of this IDS.

Submitted with this IDS is payment in the amount of \$104 for the fee under 37 CFR 1.17(p) for submission of an Information Disclosure Statement after the mailing of a first Office Action on the merits. The payment is in the form of a credit card charge authorization.

Respectfully submitted,

WOODS, FULLER, SHULTZ & SMITH P.C.

/Jeffrey A. Proehl/ **Date:** 2023-06-28
Jeffrey A. Proehl (Reg. No. 35,987)
Customer No. **40,158**
P.O. Box 5027
Sioux Falls, SD 57117-5027
(605)336-3890 FAX (605)339-3357

Appln. No. 17/988,854
Amendment dated June 28, 2023
reply to office action dated May 16, 2023

Attorney's Docket No. 58557

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re Patent Application of JASON BRENDEN et al.)
Serial No.: 17/988,854)
Filed: November 17, 2022)
For: AGGREGATE TRANSFERRING SYSTEM)
Examiner: (unassigned))
Group Art Unit: (unassigned))

Mail Stop: Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT

Responsive to the Office Action mailed May 16, 2023, please amend the application as follows:

Amendments to the Specification: None.

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

Amendments to the Drawings: None.

Remarks/Arguments begin on page 19 of this paper.

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

Listing of Claims (deleted text being struck through and added text being underlined):

1. (Currently Amended) An aggregate transferring apparatus for elevating and transferring aggregate, the apparatus comprising:

a base assembly for receiving aggregate to be conveyed by the transferring apparatus, the base assembly comprising:

a base frame being elongated along a longitudinal axis and having a leading end and a trailing end;

an unloader structure mounted on the base frame to receive aggregate from a vehicle at least partially positioned over the base frame; and

a base conveyor mounted on the base frame and extending along a longitudinal portion of the base frame between the leading and trailing ends of the base frame, a portion of the base conveyor being positioned adjacent to the unloader structure to receive aggregate from the vehicle positioned over the base frame;

an aggregate elevating assembly for elevating aggregate from the base assembly, the aggregate elevating assembly comprising:

a deployable frame mounted on the base frame and being movable between a storage position and a deploy position, the storage position corresponding to a transport configuration of the apparatus and the deploy position corresponding to an operational configuration of the apparatus, the deployable frame being elongated with a base end and a free end; and

an elevating conveyor configured to receive aggregate from the base conveyor and convey the aggregate upwardly from the base assembly toward the free end of the deployable frame; and

a conveyor extension assembly for conveying aggregate to locations horizontally outward from the aggregate elevating assembly, the conveyor extension assembly comprising:

an extension conveyor for moving aggregate from an inlet of the extension conveyor to an outlet of the extension conveyor at a location outward from the aggregate elevating assembly, the extension conveyor being movable with respect to the aggregate elevating assembly between a lowered position corresponding to the transport configuration of the apparatus and a raised position corresponding to the operational configuration of the apparatus, the lowered position being characterized by the extension conveyor being positioned adjacent to the deployable frame of the aggregate elevating assembly, the raised position being characterized by the extension conveyor being positioned generally away from the deployable frame of the aggregate elevating assembly, ~~and~~

wherein the extension conveyor is articulated between the inlet and outlet with an inboard segment and an outboard segment, the inboard segment being pivotally connected to the deployable frame of the aggregate elevating assembly by an inboard pivot, the outboard segment being pivotally connected to the inboard segment by an outboard pivot; and

wherein the inboard segment of the extension conveyor of the conveyor extension assembly is pivotable at the inboard pivot about a substantially vertical axis with respect to the deployable frame at the inboard pivot when the extension conveyor is in the raised position, the outboard segment of the extension conveyor being pivotable at the outboard pivot about a substantially vertical axis with respect to the inboard segment when the extension conveyor is in the raised position.

2. (Original) The apparatus of claim 1 wherein the base assembly has at least one axle and a pair of wheels mounted on the at least one axle such that the base assembly is transportable across the ground surface.

3. (Original) The apparatus of claim 2 wherein the aggregate elevating assembly includes trailer structure configured to permit the apparatus to be towed across a ground surface, the trailer structure being positioned adjacent to the ground surface when the deployable frame is in the storage position.

4. (Currently Amended) ~~The~~ An aggregate transferring apparatus of claim 3 for elevating and transferring aggregate, the apparatus comprising:

a base assembly for receiving aggregate to be conveyed by the transferring apparatus, the base assembly comprising:

a base frame being elongated along a longitudinal axis and having a leading end and a trailing end;

an unloader structure mounted on the base frame to receive aggregate from a vehicle at least partially positioned over the base frame; and

a base conveyor mounted on the base frame and extending along a longitudinal portion of the base frame between the leading and trailing ends of the base frame, a portion of the base conveyor being positioned adjacent to the unloader structure to receive aggregate from the vehicle positioned over the base frame;

an aggregate elevating assembly for elevating aggregate from the base assembly, the aggregate elevating assembly comprising:

a deployable frame mounted on the base frame and being movable between a storage position and a deploy position, the storage position corresponding to a transport configuration of the apparatus and the deploy position corresponding to an operational configuration

of the apparatus, the deployable frame being elongated with a base end and a free end; and

an elevating conveyor configured to receive aggregate from the base conveyor and convey the aggregate upwardly from the base assembly toward the free end of the deployable frame; and

a conveyor extension assembly for conveying aggregate to locations horizontally outward from the aggregate elevating assembly, the conveyor extension assembly comprising:

an extension conveyor for moving aggregate from an inlet of the extension conveyor to an outlet of the extension conveyor at a location outward from the aggregate elevating assembly, the extension conveyor being movable with respect to the aggregate elevating assembly between a lowered position corresponding to the transport configuration of the apparatus and a raised position corresponding to the operational configuration of the apparatus, the lowered position being characterized by the extension conveyor being positioned adjacent to the deployable frame of the aggregate elevating assembly, the raised position being characterized by the extension conveyor being positioned generally away from the deployable frame of the aggregate elevating assembly; and

wherein the extension conveyor is articulated between the inlet and outlet with an inboard segment and an outboard segment, the inboard segment being pivotally connected to the deployable frame of the aggregate elevating assembly by an inboard pivot, the outboard segment being pivotally connected to the inboard segment by an outboard pivot;

wherein the base assembly has at least one axle and a pair of wheels mounted on the at least one axle such that the base assembly is transportable across the ground surface;

wherein the aggregate elevating assembly includes trailer structure configured to permit the apparatus to be towed across a ground surface, the

trailer structure being positioned adjacent to the ground surface when the deployable frame is in the storage position;

wherein the trailer structure comprises:

at least one landing leg mounted on the deployable frame to rest upon the ground surface when the deployable frame is in the storage position; and

a kingpin mounted on the deployable frame toward the free end of the deployable frame, the kingpin being directed in a same direction as the at least one landing leg to engage a hitch of a towing vehicle when the deployable frame is in the storage position.

5. (Currently Amended) ~~The~~ An aggregate transferring apparatus of claim 1 for elevating and transferring aggregate, the apparatus comprising:

a base assembly for receiving aggregate to be conveyed by the transferring apparatus, the base assembly comprising:

a base frame being elongated along a longitudinal axis and having a leading end and a trailing end;

an unloader structure mounted on the base frame to receive aggregate from a vehicle at least partially positioned over the base frame; and

a base conveyor mounted on the base frame and extending along a longitudinal portion of the base frame between the leading and trailing ends of the base frame, a portion of the base conveyor being positioned adjacent to the unloader structure to receive aggregate from the vehicle positioned over the base frame;

an aggregate elevating assembly for elevating aggregate from the base assembly, the aggregate elevating assembly comprising:

a deployable frame mounted on the base frame and being movable between a storage position and a deploy position, the storage position corresponding to a transport configuration of the apparatus

and the deploy position corresponding to an operational configuration of the apparatus, the deployable frame being elongated with a base end and a free end; and

an elevating conveyor configured to receive aggregate from the base conveyor and convey the aggregate upwardly from the base assembly toward the free end of the deployable frame; and

a conveyor extension assembly for conveying aggregate to locations horizontally outward from the aggregate elevating assembly, the conveyor extension assembly comprising:

an extension conveyor for moving aggregate from an inlet of the extension conveyor to an outlet of the extension conveyor at a location outward from the aggregate elevating assembly, the extension conveyor being movable with respect to the aggregate elevating assembly between a lowered position corresponding to the transport configuration of the apparatus and a raised position corresponding to the operational configuration of the apparatus, the lowered position being characterized by the extension conveyor being positioned adjacent to the deployable frame of the aggregate elevating assembly, the raised position being characterized by the extension conveyor being positioned generally away from the deployable frame of the aggregate elevating assembly,

wherein the extension conveyor is articulated between the inlet and outlet with an inboard segment and an outboard segment, the inboard segment being pivotally connected to the deployable frame of the aggregate elevating assembly by an inboard pivot, the outboard segment being pivotally connected to the inboard segment by an outboard pivot; and

wherein the aggregate elevating assembly includes a frame deployment assembly configured to move the deployable frame with respect to the base frame between the storage and deploy positions, the frame deployment structure comprising:

at least one lift arm structure mounted on the base frame and the deployable frame and forming a linkage between the base frame and the deployable frame, the at least one lift arm structure being articulated between opposite first and second ends of the arm structure; and

an actuator mounted on the base frame and the at least one lift arm structure to move the at least one lift arm structure with respect to the base frame.

6. (Original) The apparatus of claim 5 wherein the at least one lift arm structure comprising a pair of the lift arm structures mounted on the base frame and the deployable frame, the pair of lift arm structures being located on opposite lateral sides of the deployable frame.

7. (Original) The apparatus of claim 5 wherein the at least one lift arm structure comprises a first link member and a second link member pivotally mounted together; and

wherein the actuator of the frame deployment assembly is mounted on a base mount point on the base frame and a medial mount point on the second link member.

8. (Original) The apparatus of claim 1 wherein the lowered position of the extension conveyor of the conveyor extension assembly is characterized by the extension conveyor being oriented substantially parallel to the deployable frame of the aggregate elevating assembly, the raised position of the extension conveyor being characterized by the extension conveyor being oriented substantially perpendicular to the deployable frame of the aggregate elevating assembly.

9. (Original) The apparatus of claim 1 wherein the raised position of the extension conveyor of the conveyor extension assembly is characterized by the extension conveyor being cantilevered outwardly from the deployable frame of the aggregate elevating assembly.

10. (Currently Amended) The apparatus of claim [[1]] 11 wherein the inboard segment of the extension conveyor of the conveyor extension assembly is pivotable at the inboard pivot about a substantially vertical axis with respect to the deployable frame at the inboard pivot when the extension conveyor is in the raised position, the outboard segment of the extension conveyor being pivotable at the outboard pivot about a substantially vertical axis with respect to the inboard segment when the extension conveyor is in the raised position.

11. (Currently Amended) ~~The~~ An aggregate transferring apparatus of claim 1

for elevating and transferring aggregate, the apparatus comprising:
a base assembly for receiving aggregate to be conveyed by the
transferring apparatus, the base assembly comprising:

a base frame being elongated along a longitudinal axis and
having a leading end and a trailing end;

an unloader structure mounted on the base frame to receive
aggregate from a vehicle at least partially positioned over the base
frame; and

a base conveyor mounted on the base frame and extending along
a longitudinal portion of the base frame between the leading and
trailing ends of the base frame, a portion of the base conveyor being
positioned adjacent to the unloader structure to receive aggregate from
the vehicle positioned over the base frame;

an aggregate elevating assembly for elevating aggregate from the base
assembly, the aggregate elevating assembly comprising:

a deployable frame mounted on the base frame and being movable between a storage position and a deploy position, the storage position corresponding to a transport configuration of the apparatus and the deploy position corresponding to an operational configuration of the apparatus, the deployable frame being elongated with a base end and a free end; and

an elevating conveyor configured to receive aggregate from the base conveyor and convey the aggregate upwardly from the base assembly toward the free end of the deployable frame; and
a conveyor extension assembly for conveying aggregate to locations horizontally outward from the aggregate elevating assembly, the conveyor extension assembly comprising:

an extension conveyor for moving aggregate from an inlet of the extension conveyor to an outlet of the extension conveyor at a location outward from the aggregate elevating assembly, the extension conveyor being movable with respect to the aggregate elevating assembly between a lowered position corresponding to the transport configuration of the apparatus and a raised position corresponding to the operational configuration of the apparatus, the lowered position being characterized by the extension conveyor being positioned adjacent to the deployable frame of the aggregate elevating assembly, the raised position being characterized by the extension conveyor being positioned generally away from the deployable frame of the aggregate elevating assembly;

wherein the extension conveyor is articulated between the inlet and outlet with an inboard segment and an outboard segment, the inboard segment being pivotally connected to the deployable frame of the aggregate elevating assembly by an inboard pivot, the outboard segment being pivotally connected to the inboard segment by an outboard pivot; and

wherein the outboard pivot of the extension conveyor of the conveyor extension assembly is configured to permit transfer of aggregate from the inboard segment to the outboard segment.

12. (Previously presented) The apparatus of claim 1 wherein the conveyor extension assembly additionally comprises:

a conveyor support frame supporting the segments of the extension conveyor on the aggregate elevating assembly, the conveyor support frame being movable with respect to the deployable frame of the aggregate elevating assembly when the extension conveyor moves between the lowered position and the raised position; and

an extension conveyor lift structure acting on the conveyor support frame for moving the extension conveyor between the lowered position and the raised position.

13. (Currently Amended) The apparatus of claim [[10]] 1 wherein the extension conveyor lift structure comprises at least one extension actuator extendable to pivot the conveyor support frame away from the deployable frame and move the extension conveyor to the raised position, the at least one extension actuator being retractable to pivot the conveyor support frame toward the deployable frame and move the extension conveyor to the lowered position.

14. (Original) The apparatus of claim 1 wherein the conveyor extension assembly includes a chute mounted on the extension conveyor to extend downward from the extension conveyor and receive aggregate from the outlet of the extension conveyor.

15. (Original) The apparatus of claim 1 wherein the base assembly includes an outrigger structure mounted on the base frame, the outrigger structure being movable with respect to the base frame between a stabilizing condition corresponding to an operational configuration of the apparatus and

a non-stabilizing condition corresponding to a transport configuration of the apparatus.

16. (Original) The apparatus of claim 1 wherein the unloader structure includes a pair of ramps and a grate mounted on the base frame, the grate being positioned between the pair of ramps, at least a portion of the grate being reticulated to permit aggregate to pass through the grate and fall onto the base conveyor.

17. (Original) The apparatus of claim 16 wherein each of the ramps of the unloader structure is pivotable with respect to the base frame, the ramps extending laterally in substantially horizontal and opposite directions from the base frame in the operational condition of the apparatus, the ramps extending substantially vertical and parallel to each other in the transport condition of the apparatus.

18. (Currently Amended) An aggregate transferring apparatus for elevating and transferring aggregate to elevated locations above a ground surface, the apparatus comprising:

- a base assembly configured to receive aggregate to be conveyed by the transferring apparatus, the base assembly including:

- an elongated base frame; and

- a base conveyor extending longitudinally of the base frame;

- an aggregate elevating assembly configured to elevate aggregate from the base conveyor of the base assembly, the aggregate elevating assembly including:

- a deployable frame mounted on the base frame and being movable between a storage position and a deploy position; and

- an elevating conveyor configured to receive aggregate from the base conveyor and convey the aggregate upwardly from the base assembly toward a free end of the deployable frame; and

a conveyor extension assembly configured to convey aggregate to locations elevated from the ground surface and horizontally outward from the aggregate elevating assembly, the conveyor extension assembly comprising:

an extension conveyor for moving aggregate from an inlet of the extension conveyor at the aggregate elevating assembly to an outlet of the extension conveyor at a location outward from the elevating assembly;~~and~~ ;

wherein the extension conveyor includes an inboard segment and an outboard segment, the inboard and outboard segments being articulated between the inlet and outlet such that the inboard and outboard segments are pivotable with respect to each other and with respect to the aggregate elevating assembly about substantially vertical axes to permit adjustment of a position of the outlet with respect to the aggregate elevating assembly; and

wherein the inboard and outboard segments of the extension conveyor are pivotable with respect to each other in a substantially horizontal operational plane.

19. (Currently Amended) The apparatus of claim [[18]] 23 wherein the inboard and outboard segments of the extension conveyor are pivotable with respect to each other in a substantially horizontal operational plane.

20. (Previously presented) The apparatus of claim 18 wherein the extension conveyor is movable with respect to the aggregate elevating assembly between a lowered position corresponding to the transport configuration of the apparatus and a raised position corresponding to the operational configuration of the apparatus for movement of the inboard and outboard segments in a substantially horizontal operational plane.

21. (Previously presented) The apparatus of claim 18 wherein the inboard segment of the extension conveyor is pivotable with respect to the

aggregate elevating assembly at an inboard pivot, the outboard segment of the extension conveyor being pivotable with respect to the inboard segment at an outboard pivot spaced from the elevating assembly by the inboard segment.

22. (Currently Amended) ~~The~~ An aggregate transferring apparatus of claim 21 for elevating and transferring aggregate to elevated locations above a ground surface, the apparatus comprising:

a base assembly configured to receive aggregate to be conveyed by the transferring apparatus, the base assembly including:

an elongated base frame; and

a base conveyor extending longitudinally of the base frame;

an aggregate elevating assembly configured to elevate aggregate from the base conveyor of the base assembly, the aggregate elevating assembly including:

a deployable frame mounted on the base frame and being movable between a storage position and a deploy position; and

an elevating conveyor configured to receive aggregate from the base conveyor and convey the aggregate upwardly from the base assembly toward a free end of the deployable frame; and

a conveyor extension assembly configured to convey aggregate to locations elevated from the ground surface and horizontally outward from the aggregate elevating assembly, the conveyor extension assembly comprising:

an extension conveyor for moving aggregate from an inlet of the extension conveyor at the aggregate elevating assembly to an outlet of the extension conveyor at a location outward from the elevating assembly;

wherein the extension conveyor includes an inboard segment and an outboard segment, the inboard and outboard segments being articulated between the inlet and outlet such that the inboard and outboard segments are

pivotal with respect to each other and with respect to the aggregate elevating assembly about substantially vertical axes to permit adjustment of a position of the outlet with respect to the aggregate elevating assembly;

wherein the inboard segment of the extension conveyor is pivotal with respect to the aggregate elevating assembly at an inboard pivot, the outboard segment of the extension conveyor being pivotal with respect to the inboard segment at an outboard pivot spaced from the elevating assembly by the inboard segment; and

wherein the inboard segment of the extension conveyor of the conveyor extension assembly is pivotal at the inboard pivot about a substantially vertical axis with respect to the deployable frame at the inboard pivot when the extension conveyor is in the raised position, the outboard segment of the extension conveyor being pivotal at the outboard pivot about a substantially vertical axis with respect to the inboard segment when the extension conveyor is in the raised position.

23. (Currently Amended) ~~The~~ An aggregate transferring apparatus of claim 21 for elevating and transferring aggregate to elevated locations above a ground surface, the apparatus comprising:

a base assembly configured to receive aggregate to be conveyed by the transferring apparatus, the base assembly including:

an elongated base frame; and

a base conveyor extending longitudinally of the base frame;

an aggregate elevating assembly configured to elevate aggregate from the base conveyor of the base assembly, the aggregate elevating assembly including:

a deployable frame mounted on the base frame and being movable between a storage position and a deploy position; and

an elevating conveyor configured to receive aggregate from the base conveyor and convey the aggregate upwardly from the base assembly toward a free end of the deployable frame; and

a conveyor extension assembly configured to convey aggregate to locations elevated from the ground surface and horizontally outward from the aggregate elevating assembly, the conveyor extension assembly comprising:

an extension conveyor for moving aggregate from an inlet of the extension conveyor at the aggregate elevating assembly to an outlet of the extension conveyor at a location outward from the elevating assembly;

wherein the extension conveyor includes an inboard segment and an outboard segment, the inboard and outboard segments being articulated between the inlet and outlet such that the inboard and outboard segments are pivotable with respect to each other and with respect to the aggregate elevating assembly about substantially vertical axes to permit adjustment of a position of the outlet with respect to the aggregate elevating assembly;

wherein the inboard segment of the extension conveyor is pivotable with respect to the aggregate elevating assembly at an inboard pivot, the outboard segment of the extension conveyor being pivotable with respect to the inboard segment at an outboard pivot spaced from the elevating assembly by the inboard segment; and

wherein the outboard pivot of the extension conveyor of the conveyor extension assembly is configured to permit transfer of aggregate from the inboard segment to the outboard segment.

24. (Previously presented) The apparatus of claim 18 wherein the aggregate elevating assembly includes trailer structure configured to permit the apparatus to be towed across a ground surface, the trailer structure being positioned adjacent to the ground surface when the deployable frame is in the storage position.

25. (Currently Amended) ~~The~~ An aggregate transferring apparatus of claim 24 for elevating and transferring aggregate to elevated locations above a ground surface, the apparatus comprising:

a base assembly configured to receive aggregate to be conveyed by the transferring apparatus, the base assembly including:

an elongated base frame; and

a base conveyor extending longitudinally of the base frame;

an aggregate elevating assembly configured to elevate aggregate from the base conveyor of the base assembly, the aggregate elevating assembly including:

a deployable frame mounted on the base frame and being movable between a storage position and a deploy position; and

an elevating conveyor configured to receive aggregate from the base conveyor and convey the aggregate upwardly from the base assembly toward a free end of the deployable frame; and

a conveyor extension assembly configured to convey aggregate to locations elevated from the ground surface and horizontally outward from the aggregate elevating assembly, the conveyor extension assembly comprising:

an extension conveyor for moving aggregate from an inlet of the extension conveyor at the aggregate elevating assembly to an outlet of the extension conveyor at a location outward from the elevating assembly;

wherein the extension conveyor includes an inboard segment and an outboard segment, the inboard and outboard segments being articulated between the inlet and outlet such that the inboard and outboard segments are pivotable with respect to each other and with respect to the aggregate elevating assembly about substantially vertical axes to permit adjustment of a position of the outlet with respect to the aggregate elevating assembly;

wherein the aggregate elevating assembly includes trailer structure configured to permit the apparatus to be towed across a ground surface, the trailer structure being positioned adjacent to the ground surface when the deployable frame is in the storage position; and

wherein the trailer structure comprises:

at least one landing leg mounted on the deployable frame to rest upon the ground surface when the deployable frame is in the storage position; and

a kingpin mounted on the deployable frame toward a free end of the deployable frame, the kingpin being directed in a same direction as the at least one landing leg to engage a hitch of a towing vehicle when the deployable frame is in the storage position.

REMARKS

Reconsideration is respectfully requested.

Status of Claims:

No claims have been cancelled.

No claims have been withdrawn.

No claims have been added.

Therefore, claims 1 through 25 are pending in this application.

The Examiner's objections and/or rejections will be considered in the order of their occurrence in the Office Action.

Parts 1 and 2 of the Office Action

Claims 1 through 3, 8, 9, 12, 15 through 18, 20, 21 and 24 have been rejected under 35 U.S.C. 103 as being unpatentable over U.S. Patent No. 9,663,303 to Waldner et al. in view of U.S. Patent Application Publication No. 2016/0280467 to Herman et al.

Claim 14 has been rejected under 35 U.S.C. 103 as being unpatentable over Waldner et al. in view of Herman et al. as applied to claim 1 above, and further in view of patent application no. 2020/0140202 to Grose et al.

It is noted that claims 4, 5, 6, 7, 10, 11, 13, 19, 22, 23, and 25 were not rejected in the office action based upon prior art, and thus are deemed to be patentable over the prior art.

Claim 1 has been amended to include the requirements of claim 10, and by virtue of the incorporation of the subject matter of claim 10 which was not subject to a prior art rejection, it is respectfully submitted that claim 1 is in condition for allowance. Additionally, claims 2, 3, 8, 9, 12

through 14, 15, 16 and 17, which depend from claim 1 as amended, are also submitted to be in condition for allowance.

Additionally, claim 4, which was also not rejected based upon the prior art, has been rewritten into independent form by including the requirements of claims 1, 2, and 3, and claim 4 is submitted to be in condition for allowance.

Further, claim 5, which was not rejected based upon the prior art, has been rewritten into independent form by including the requirements of claim 1, and claim 5 is submitted to be in condition for allowance.

Claim 11, which was not rejected based upon the prior art, has been rewritten into independent form by including the requirements of claim 1, and claim 11 is submitted to be in condition for allowance.

Claim 18 has been amended to include the requirements of claim 19, and by virtue of the incorporation of the subject matter of claim 19 which was not subject to a prior art rejection, it is respectfully submitted that claim 18 is in condition for allowance. Additionally, claims 20, 21, and 24, which depend from claim 18 as amended, are also submitted to be in condition for allowance.

Additionally, claim 22, which was also not rejected based upon the prior art, has been rewritten into independent form by including the requirements of claims 18 and 21, and claim 22 is submitted to be in condition for allowance.

Also, claim 23, which was not rejected based upon the prior art, has been rewritten into independent form by including the requirements of claims 18 and 21, and claim 23 is submitted to be in condition for allowance.

Appln. No. 17/988,854
Amendment dated June 28, 2023
reply to office action dated May 16, 2023

Further, claim 25, which was not rejected based upon the prior art, has been rewritten into independent form by including the requirements of claims 18 and 24, and claim 25 is submitted to be in condition for allowance.

Withdrawal of the §103 rejections of claims 1 through 3, 8, 9, 12, 14 through 18, 20, 21 and 24 is therefore respectfully requested.

Part 3 of the Office Action

Claims 1 through 25 have been provisionally rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-17 of co-pending Application No. 17/550,073 (reference application).

The provisional rejection of claims 1 through 25 based upon the unpatented claims of the co-pending application is noted. Upon the allowance and patenting of claims in the present application or co-pending application number 17/550, 073, adjustments to the scope of the remaining pending claims will be made to avoid any double patenting.

CONCLUSION

In light of the foregoing amendments and remarks, early consideration and allowance of this application are most courteously solicited.

Respectfully submitted,

WOODS, FULLER, SHULTZ & SMITH P.C.

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Date: June 28, 2023

Electronic Patent Application Fee Transmittal				
Application Number:		17988854		
Filing Date:		17-Nov-2022		
Title of Invention:		AGGREGATE TRANSFERRING SYSTEM		
First Named Inventor/Applicant Name:		JASON BRENDEN		
Filer:		Jeffrey A. Proehl/Wanita Jacobsma		
Attorney Docket Number:		58557		
Filed as Small Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
INDEPENDENT CLAIMS IN EXCESS OF 3	2201	5	192	960
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 (\$)				960

Electronic Acknowledgement Receipt	
EFS ID:	48218546
Application Number:	17988854
International Application Number:	
Confirmation Number:	1045
Title of Invention:	AGGREGATE TRANSFERRING SYSTEM
First Named Inventor/Applicant Name:	JASON BRENDEN
Customer Number:	40158
Filer:	Jeffrey A. Proehl/Wanita Jacobsma
Filer Authorized By:	Jeffrey A. Proehl
Attorney Docket Number:	58557
Receipt Date:	28-JUN-2023
Filing Date:	17-NOV-2022
Time Stamp:	09:58:33
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$960
RAM confirmation Number	E20236R059527328
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		05249833.PDF	128331	yes	21
			e784301c5551eae75ae981d854fa87103b91f401		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Amendment/Request for Reconsideration-After Non-Final Rejection		1	1	
	Claims		2	18	
	Applicant Arguments/Remarks Made in an Amendment		19	21	
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	38329	no	2
			740a95dd78b71951075e11bd50ef0e5b1abbd91		
Warnings:					
Information:					
Total Files Size (in bytes):			166660		

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New Applications Under 35 U.S.C. 111

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

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

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

New International Application Filed with the USPTO as a Receiving Office

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



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/988,854	11/17/2022	JASON BRENDEN	58557	1045
40158 7590 05/16/2023 WOODS FULLER SHULTZ & SMITH P.C. ATTN: JEFFREY A. PROEHL P.O. BOX 5027 SIOUX FALLS, SD 57117			EXAMINER BERRY JR, WILLIE WENDELL	
			ART UNIT 3652	PAPER NUMBER
			MAIL DATE 05/16/2023	DELIVERY MODE PAPER

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.

DETAILED ACTION

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.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis (i.e., changing from AIA to pre-AIA) for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim(s) 1-3, 8, 9, 12, 15-18, 20, 21 and 24 is/are rejected under 35 U.S.C. 103 as being unpatentable over patent no. 9,663,303 to Waldner et al. in view of patent application no. 2016/0280467 to Herman et al.

Regarding claims 1, 8, 9 and 20, Waldner et al. discloses a base assembly comprising: a base frame (not numbered, but shown in fig. 1) being elongated along a longitudinal axis and having a leading end and a trailing end; an unloader structure (30a and 30b) mounted on the base frame to receive aggregate from a vehicle at least partially positioned over the base frame; and a base conveyor (40) mounted on the base frame and extending along a longitudinal portion of the base frame between the leading and trailing ends of the base frame, a portion of the base conveyor being positioned adjacent to the unloader structure to receive aggregate from the vehicle positioned over the base frame; an aggregate elevating assembly (50) for elevating aggregate from the base assembly, the aggregate elevating assembly comprising: a deployable frame (52) mounted on the base frame and being movable between a storage position and a deploy position (col. 14, lines 23-46), the storage position corresponding to a transport configuration of the apparatus and the deploy position corresponding to an operational configuration of the apparatus, the deployable frame being elongated with a base end and a free end; and an elevating conveyor (col. 14, lines 47-54) configured to receive aggregate from the base conveyor and convey the aggregate upwardly from the base assembly toward the free end of the deployable frame.

Waldner et al. discloses the claimed invention except for the conveyor extension assembly having an outboard pivot.

Herman et al. discloses that it is known to have a conveyor extension assembly (11) having an extension conveyor (19), inboard segment (paragraph 24), inboard pivot (paragraph 23) and outboard segment (paragraph 24) in a storage system.

It would have been obvious to one having ordinary skill in the art before the effective filing date of the invention to have modified Waldner et al. with the teachings of Herman et al. by adding the conveyor extension assembly with a reasonable expectation of success for the purpose of providing increased flexibility in the conveyor assembly of Waldner et al.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to add the outboard pivot for the purpose of increasing the distribution capabilities of Waldner et al. and, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Regarding claim 2, Waldner et al. discloses at least one axle (not numbered, but shown in fig. 1) and a pair of wheels (28).

Regarding claims 3 and 24, Waldner et al. discloses a trailer (10).

Regarding claim 12, Herman et al. discloses a conveyor support frame (not numbered, but shown in fig. 1) and extension conveyor lift structure (15).

Regarding claim 15, Waldner et al. discloses outrigger structure (62a and 62b).

Regarding claims 16 and 17, Waldner et al. discloses ramps (32 and 34) and a grate (38).

Claim(s) 14 is/are rejected under 35 U.S.C. 103 as being unpatentable over Waldner et al. in view of Herman et al. as applied to claim 1 above, and further in view of patent application no. 2020/0140202 to Grose et al.

Regarding claim 14, Waldner et al. in view of Herman et al. discloses the claimed invention except for the chute.

Grose et al. discloses that it is known to have a chute (28) in a transfer apparatus.

It would have been obvious to one having ordinary skill in the art before the effective filing date of the invention to have modified Waldner et al. in view of Herman et al. with the teachings of Grose et al. by adding the chute with a reasonable expectation of success for the purpose of providing increased flexibility in the conveyor assembly of Waldner et al.

Double Patenting

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 § 2146 *et seq.* 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 filing of a terminal disclaimer by itself is not a complete reply to a nonstatutory double patenting (NSDP) rejection. A complete reply requires that the terminal disclaimer be accompanied by a reply requesting reconsideration of the prior Office action. Even where the NSDP rejection is provisional the reply must be complete. See MPEP § 804, subsection I.B.1. For a reply to a non-final Office action, see 37 CFR 1.111(a). For a reply to final Office action, see 37 CFR 1.113(c). A request for reconsideration

while not provided for in 37 CFR 1.113(c) may be filed after final for consideration. See MPEP §§ 706.07(e) and 714.13.

The USPTO Internet website contains terminal disclaimer forms which may be used. Please visit www.uspto.gov/patent/patents-forms. The actual 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/apply/applying-online/eterminal-disclaimer.

Claims 1-25 are provisionally rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-17 of copending Application No. 17/550,073 (reference application). Although the claims at issue are not identical, they are not patentably distinct from each other because they both disclose similar embodiments of aggregate transferring apparatus.

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

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIE WENDELL BERRY JR whose telephone number is (571)272-6191. The examiner can normally be reached Mon. thru Fri. 11 am - 8 pm.

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, Saul Rodriguez can be reached on (571) 272-7097. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of published or unpublished applications may be obtained from Patent Center. Unpublished application information in Patent Center is available to registered users. To file and manage patent submissions in Patent Center, visit: <https://patentcenter.uspto.gov>. Visit <https://www.uspto.gov/patents/apply/patent-center> for more information about Patent Center and <https://www.uspto.gov/patents/docx> for information about filing in DOCX format. For additional questions, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Wbj.

/SAUL RODRIGUEZ/
Supervisory Patent Examiner, Art Unit 3652

<i>Notice of References Cited</i>	Application/Control No. 17/988,854		Applicant(s)/Patent Under Reexamination BRENDEN et al.	
	Examiner WILLIE W BERRY JR		Art Unit 3652	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-9663303-B2	05-2017	Waldner; Raymond	B65G41/008	1/1
*	B	US-20160280467-A1	09-2016	Herman; Alvin	B65G65/32	1/1
*	C	US-20200140202-A1	05-2020	Grose; Darren James	B65G41/005	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	
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	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. 17/988,854	Applicant(s)/Patent Under Reexamination BRENDEN et al.
	Examiner WILLIE W BERRY JR	Art Unit 3652

CPC - Searched*		
Symbol	Date	Examiner
B65G 2201/042	05/05/2023	WB
B65G 67/08	05/05/2023	WB

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
Inventor's Search	05/05/2023	WB
Assignee Search - No Data	05/05/2023	WB

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

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<i>Index of Claims</i> 	Application/Control No. 17/988,854	Applicant(s)/Patent Under Reexamination BRENDEN et al.
	Examiner WILLIE W BERRY JR	Art Unit 3652

✓	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	05/06/2023								
	1	✓								
	2	✓								
	3	✓								
	4	✓								
	5	✓								
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	23	✓								
	24	✓								
	25	✓								

PE2E SEARCH - Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
L1	1	("9663303").pn.	(US-PGPUB; USPAT)	OR	ON	ON	2023/05/04 07:02 AM
L2	67	((("BRENDEN") near3 ("JASON")) OR (("DEWITT") near3 ("TYLER"))).INV.	(US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT)	OR	ON	ON	2023/05/05 02:57 AM
L3	933	B65G67/08.cpc.	(US-PGPUB; USPAT; DERWENT)	OR	ON	ON	2023/05/05 03:02 AM
L4	1082	B65G2201/042.cpc.	(US-PGPUB; USPAT; DERWENT)	OR	ON	ON	2023/05/05 04:27 AM
L5	34	("3170560" "3378152" "3606050" "5297914" "5964566" "7063497" "7090066" "7424943" "8196729" "8684161" "8960412" "20050220579").pn. OR ("9663303").urpn. AND (PGPB USPT USOC).dbnm.	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2023/05/05 09:37 PM

PE2E SEARCH - Search History (Interference)

There are no Interference searches to show.

Bibliographic Data

Application No: 17/988,854

Foreign Priority claimed: ☐ Yes ☒ No

35 USC 119 (a-d) conditions met: ☐ Yes ☒ No ☐ Met After Allowance

Verified and Acknowledged: /WILLIE W BERRY JR/

Examiner's Signature

Initials

Title: AGGREGATE TRANSFERRING SYSTEM

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
11/17/2022	414	3652	58557
RULE			

APPLICANTS

INVENTORS

JASON BRENDEN, ELK POINT, SD, UNITED STATES

TYLER DEWITT, VERMILLION, SD, UNITED STATES

CONTINUING DATA

This application is a CON of 17550073 12/14/2021

17550073 has PRO of 63223124 07/19/2021

FOREIGN APPLICATIONS

IF REQUIRED, FOREIGN LICENSE GRANTED**

11/30/2022

** SMALL ENTITY **

STATE OR COUNTRY

UNITED STATES

ADDRESS

WOODS FULLER SHULTZ & SMITH P.C.

ATTN: JEFFREY A. PROEHL

P.O. BOX 5027

SIOUX FALLS, SD 57117

UNITED STATES

FILING FEE RECEIVED

\$3,000

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (01-22)

Approved for use through 05/31/2024. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	
	Filing Date	
	First Named Inventor	JASON BRENDEN
	Art Unit	
	Examiner Name	
	Attorney Docket Number	58557

U.S. PATENTS							Remove	
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear		
/W.W.B./	1	9663303		2017-05-30	WALDNER			
If you wish to add additional U.S. Patent citation information please click the Add button.							Add	
U.S. PATENT APPLICATION PUBLICATIONS							Remove	
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear		
	1							
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Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²ⁱ	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	
First Named Inventor	JASON BRENDEN
Art Unit	
Examiner Name	
Attorney Docket Number	58557

1	
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If you wish to add additional non-patent literature document citation information please click the Add button

EXAMINER SIGNATURE

Examiner Signature	/WILLIE W BERRY JR/	Date Considered	05/06/2023
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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

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

Application Number	
Filing Date	
First Named Inventor	JASON BRENDEN
Art Unit	
Examiner Name	
Attorney Docket Number	58557

CERTIFICATION STATEMENT

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

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

OR

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



☐ See attached certification statement.

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

A certification statement is not submitted herewith.

SIGNATURE

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

Signature	/Jeffrey A. Proehl/	Date (YYYY-MM-DD)	2022-11-17
Name/Print	Jeffrey A. Proehl	Registration Number	35987

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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

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

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

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re Patent Application of JASON BRENDEN et al.)
Serial No.: 17/988,854)
Filed: November 17, 2022)
For: AGGREGATE TRANSFERRING SYSTEM)
Examiner: Berry, Jr.; Willie Wendell)
Group Art Unit: 3652)

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

STATUS INQUIRY

The undersigned respectfully requests the status of the subject application. The subject application was filed on November 17, 2022 with a “Request for Prioritized Examination under 37 CFR 1.102(e)” (Track One) with the requisite fee. A “Notice to File Corrected Application Papers” was mailed on December 1, 2022, and a response to the Notice was filed by the undersigned on December 14, 2022 , which led to the mailing of an updated official filing receipt on December 19, 2022.

Further, a “Decision Granting Request for Prioritized Examination (Track I)” was mailed by the U.S.P.T.O. on January 13, 2023, that indicated that the request for prioritized examination have been granted and would undergo prioritized examination.

As of the current date, no further communication or action has been recorded on the U.S.P.T.O. PAIRS website for the patent application.

Any clarification on the time to the first Office action would be greatly appreciated.

Respectfully submitted,

WOODS, FULLER, SHULTZ & SMITH P.C.

/Jeffrey A. Proehl/ **Date:** April 6, 2023
Jeffrey A. Proehl (Reg. No. 35,987)
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Sioux Falls, SD 57117-5027
(605)336-3890 FAX (605)339-3357

Electronic Acknowledgement Receipt	
EFS ID:	47801202
Application Number:	17988854
International Application Number:	
Confirmation Number:	1045
Title of Invention:	AGGREGATE TRANSFERRING SYSTEM
First Named Inventor/Applicant Name:	JASON BRENDEN
Customer Number:	40158
Filer:	Jeffrey A. Proehl/Wanita Jacobsma
Filer Authorized By:	Jeffrey A. Proehl
Attorney Docket Number:	58557
Receipt Date:	06-APR-2023
Filing Date:	17-NOV-2022
Time Stamp:	11:01:01
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for status of Application	05131149.PDF	77142	no	2
			cf5d9456c1342fa52498acb2b6a17e002916149		

Warnings:

Information:	
Total Files Size (in bytes):	77142
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.	



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/988,854	11/17/2022	JASON BRENDEN	58557	1045
40158 7590 01/13/2023 WOODS FULLER SHULTZ & SMITH P.C. ATTN: JEFFREY A. PROEHL P.O. BOX 5027 SIOUX FALLS, SD 57117			EXAMINER CENTRAL, DOCKET	
			ART UNIT OPAP	PAPER NUMBER
			MAIL DATE 01/13/2023	DELIVERY MODE PAPER

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.

<i>Decision Granting Request for Prioritized Examination (Track I)</i>	Application No. 17/988,854	Applicant(s) BRENDEN et al.	
	Examiner CHERYL P GIBSON BAYLOR	Art Unit OPET	AIA (FITF) Status Yes
1. THE REQUEST FILED <u>17 November 2022</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 CHERYL GIBSON BAYLOR at (571)272-3213. In his/her absence, calls may be directed to Petition Help Desk at (571) 272-3282.			
/CHERYL GIBSON BAYLOR/ Paralegal Specialist, OPET			

Appln. No. 17/988,854
Preliminary Amendment dated December 14, 2022

Attorney's Docket No. 58557

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re Patent Application of JASON BRENDEN et al.)
Serial No.: 17/988,854)
Filed: November 17, 2022)
For: AGGREGATE TRANSFERRING SYSTEM)
Examiner: (unassigned))
Group Art Unit: (unassigned))

Mail Stop: Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRELIMINARY AMENDMENT

In connection with the subject application, please amend the application as follows:

Amendments to the Specification: None.

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

Amendments to the Drawings: None.

Remarks/Arguments begin on page 11 of this paper.

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

Listing of Claims (deleted text being struck through and added text being underlined):

1. (Original) An aggregate transferring apparatus for elevating and transferring aggregate, the apparatus comprising:

a base assembly for receiving aggregate to be conveyed by the transferring apparatus, the base assembly comprising:

a base frame being elongated along a longitudinal axis and having a leading end and a trailing end;

an unloader structure mounted on the base frame to receive aggregate from a vehicle at least partially positioned over the base frame; and

a base conveyor mounted on the base frame and extending along a longitudinal portion of the base frame between the leading and trailing ends of the base frame, a portion of the base conveyor being positioned adjacent to the unloader structure to receive aggregate from the vehicle positioned over the base frame;

an aggregate elevating assembly for elevating aggregate from the base assembly, the aggregate elevating assembly comprising:

a deployable frame mounted on the base frame and being movable between a storage position and a deploy position, the storage position corresponding to a transport configuration of the apparatus and the deploy position corresponding to an operational configuration of the apparatus, the deployable frame being elongated with a base end and a free end; and

an elevating conveyor configured to receive aggregate from the base conveyor and convey the aggregate upwardly from the base assembly toward the free end of the deployable frame; and

a conveyor extension assembly for conveying aggregate to locations horizontally outward from the aggregate elevating assembly, the conveyor extension assembly comprising:

an extension conveyor for moving aggregate from an inlet of the extension conveyor to an outlet of the extension conveyor at a location outward from the aggregate elevating assembly, the extension conveyor being movable with respect to the aggregate elevating assembly between a lowered position corresponding to the transport configuration of the apparatus and a raised position corresponding to the operational configuration of the apparatus, the lowered position being characterized by the extension conveyor being positioned adjacent to the deployable frame of the aggregate elevating assembly, the raised position being characterized by the extension conveyor being positioned generally away from the deployable frame of the aggregate elevating assembly, and

wherein the extension conveyor is articulated between the inlet and outlet with an inboard segment and an outboard segment, the inboard segment being pivotally connected to the deployable frame of the aggregate elevating assembly by an inboard pivot, the outboard segment being pivotally connected to the inboard segment by an outboard pivot.

2. (Original) The apparatus of claim 1 wherein the base assembly has at least one axle and a pair of wheels mounted on the at least one axle such that the base assembly is transportable across the ground surface.

3. (Original) The apparatus of claim 2 wherein the aggregate elevating assembly includes trailer structure configured to permit the apparatus to be towed across a ground surface, the trailer structure being positioned adjacent to the ground surface when the deployable frame is in the storage position.

4. (Original) The apparatus of claim 3 wherein the trailer structure comprises:

at least one landing leg mounted on the deployable frame to rest upon the ground surface when the deployable frame is in the storage position; and
a kingpin mounted on the deployable frame toward the free end of the deployable frame, the kingpin being directed in a same direction as the at least one landing leg to engage a hitch of a towing vehicle when the deployable frame is in the storage position.

5. (Original) The apparatus of claim 1 wherein the aggregate elevating assembly includes a frame deployment assembly configured to move the deployable frame with respect to the base frame between the storage and deploy positions, the frame deployment structure comprising:

at least one lift arm structure mounted on the base frame and the deployable frame and forming a linkage between the base frame and the deployable frame, the at least one lift arm structure being articulated between opposite first and second ends of the arm structure; and

an actuator mounted on the base frame and the at least one lift arm structure to move the at least one lift arm structure with respect to the base frame.

6. (Original) The apparatus of claim 5 wherein the at least one lift arm structure comprising a pair of the lift arm structures mounted on the base frame and the deployable frame, the pair of lift arm structures being located on opposite lateral sides of the deployable frame.

7. (Original) The apparatus of claim 5 wherein the at least one lift arm structure comprises a first link member and a second link member pivotally mounted together; and

wherein the actuator of the frame deployment assembly is mounted on a base mount point on the base frame and a medial mount point on the second link member.

8. (Original) The apparatus of claim 1 wherein the lowered position of the extension conveyor of the conveyor extension assembly is characterized by the extension conveyor being oriented substantially parallel to the deployable frame of the aggregate elevating assembly, the raised position of the extension conveyor being characterized by the extension conveyor being oriented substantially perpendicular to the deployable frame of the aggregate elevating assembly.

9. (Original) The apparatus of claim 1 wherein the raised position of the extension conveyor of the conveyor extension assembly is characterized by the extension conveyor being cantilevered outwardly from the deployable frame of the aggregate elevating assembly.

10. (Original) The apparatus of claim 1 wherein the inboard segment of the extension conveyor of the conveyor extension assembly is pivotable at the inboard pivot about a substantially vertical axis with respect to the deployable frame at the inboard pivot when the extension conveyor is in the raised position, the outboard segment of the extension conveyor being pivotable at the outboard pivot about a substantially vertical axis with respect to the inboard segment when the extension conveyor is in the raised position.

11. The apparatus of claim 1 wherein the outboard pivot of the extension conveyor of the conveyor extension assembly is configured to permit transfer of aggregate from the inboard segment to the outboard segment.

12. (Currently Amended) The apparatus of claim 1 wherein the conveyor extension assembly additionally comprises:

a conveyor support frame supporting the segments of the extension conveyor on the aggregate elevating assembly, the conveyor support frame being movable with respect to the deployable frame of the aggregate elevating assembly when the extension conveyor moves between the lowered position and the raised position; and

an extension conveyor lift structure acting on the conveyor support frame for moving the extension conveyor between the lowered position and the raised position [[,]] _

13. (Original) The apparatus of claim 10 wherein the extension conveyor lift structure comprises at least one extension actuator extendable to pivot the conveyor support frame away from the deployable frame and move the extension conveyor to the raised position, the at least one extension actuator being retractable to pivot the conveyor support frame toward the deployable frame and move the extension conveyor to the lowered position.

14. (Original) The apparatus of claim 1 wherein the conveyor extension assembly includes a chute mounted on the extension conveyor to extend downward from the extension conveyor and receive aggregate from the outlet of the extension conveyor.

15. (Original) The apparatus of claim 1 wherein the base assembly includes an outrigger structure mounted on the base frame, the outrigger structure being movable with respect to the base frame between a stabilizing condition corresponding to an operational configuration of the apparatus and a non-stabilizing condition corresponding to a transport configuration of the apparatus.

16. (Original) The apparatus of claim 1 wherein the unloader structure includes a pair of ramps and a grate mounted on the base frame, the grate being positioned between the pair of ramps, at least a portion of the grate being reticulated to permit aggregate to pass through the grate and fall onto the base conveyor.

17. (Original) The apparatus of claim 16 wherein each of the ramps of the unloader structure is pivotable with respect to the base frame, the ramps extending laterally in substantially horizontal and opposite directions from the base frame in the operational condition of the apparatus, the ramps extending substantially vertical and parallel to each other in the transport condition of the apparatus.

18. (New) An aggregate transferring apparatus for elevating and transferring aggregate to elevated locations above a ground surface, the apparatus comprising:

a base assembly configured to receive aggregate to be conveyed by the transferring apparatus, the base assembly including:

an elongated base frame; and

a base conveyor extending longitudinally of the base frame;

an aggregate elevating assembly configured to elevate aggregate from the base conveyor of the base assembly, the aggregate elevating assembly including:

a deployable frame mounted on the base frame and being movable between a storage position and a deploy position; and

an elevating conveyor configured to receive aggregate from the base conveyor and convey the aggregate upwardly from the base assembly toward a free end of the deployable frame; and

a conveyor extension assembly configured to convey aggregate to locations elevated from the ground surface and horizontally outward from the aggregate elevating assembly, the conveyor extension assembly comprising:

an extension conveyor for moving aggregate from an inlet of the extension conveyor at the aggregate elevating assembly to an outlet of the extension conveyor at a location outward from the elevating assembly, and

wherein the extension conveyor includes an inboard segment and an outboard segment, the inboard and outboard segments being articulated between the inlet and outlet such that the inboard and outboard segments are pivotable with respect to each other and with respect to the aggregate elevating assembly about substantially vertical axes to permit adjustment of a position of the outlet with respect to the aggregate elevating assembly.

19. (New) The apparatus of claim 18 wherein the inboard and outboard segments of the extension conveyor are pivotable with respect to each other in a substantially horizontal operational plane.

20. (New) The apparatus of claim 18 wherein the extension conveyor is movable with respect to the aggregate elevating assembly between a lowered position corresponding to the transport configuration of the apparatus and a raised position corresponding to the operational configuration of the apparatus for movement of the inboard and outboard segments in a substantially horizontal operational plane.

21. (New) The apparatus of claim 18 wherein the inboard segment of the extension conveyor is pivotable with respect to the aggregate elevating assembly at an inboard pivot, the outboard segment of the extension conveyor being pivotable with respect to the inboard segment at an outboard pivot spaced from the elevating assembly by the inboard segment.

22. (New) The apparatus of claim 21 wherein the inboard segment of the extension conveyor of the conveyor extension assembly is pivotable at the inboard pivot about a substantially vertical axis with respect to the deployable frame at the inboard pivot when the extension conveyor is in the raised position, the outboard segment of the extension conveyor being pivotable at the outboard pivot about a substantially vertical axis with respect to the inboard segment when the extension conveyor is in the raised position.

23. (New) The apparatus of claim 21 wherein the outboard pivot of the extension conveyor of the conveyor extension assembly is configured to permit transfer of aggregate from the inboard segment to the outboard segment.

24. (New) The apparatus of claim 18 wherein the aggregate elevating assembly includes trailer structure configured to permit the apparatus to be towed across a ground surface, the trailer structure being positioned adjacent to the ground surface when the deployable frame is in the storage position.

25. (New) The apparatus of claim 24 wherein the trailer structure comprises:

at least one landing leg mounted on the deployable frame to rest upon the ground surface when the deployable frame is in the storage position; and

a kingpin mounted on the deployable frame toward a free end of the deployable frame, the kingpin being directed in a same direction as the at least one landing leg to engage a hitch of a towing vehicle when the deployable frame is in the storage position.

REMARKS

Reconsideration is respectfully requested.

Status of Claims:

No claims have been cancelled.

No claims have been withdrawn.

Claims 18 through 25 have been added.

Therefore, claims 1 through 25 are pending in this application.

Entry of the above amendments to the claims is respectfully requested.

CONCLUSION

In light of the foregoing amendments and remarks, early consideration and allowance of this application are most courteously solicited.

Respectfully submitted,

WOODS, FULLER, SHULTZ & SMITH P.C.

/Jeffrey A. Proehl/
Jeffrey A. Proehl (Reg. No. 35,987)
Customer No. **40,158**
P.O. Box 5027
Sioux Falls, SD 57117-5027
(605)336-3890 FAX (605)339-3357

Date: December 14, 2022

Electronic Patent Application Fee Transmittal				
Application Number:		17988854		
Filing Date:		17-Nov-2022		
Title of Invention:		AGGREGATE TRANSFERRING SYSTEM		
First Named Inventor/Applicant Name:		JASON BRENDEN		
Filer:		Jeffrey A. Proehl/Wanita Jacobsma		
Attorney Docket Number:		58557		
Filed as Small Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
CLAIMS IN EXCESS OF 20	2202	5	50	250
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 (\$)				250

Electronic Acknowledgement Receipt	
EFS ID:	47202970
Application Number:	17988854
International Application Number:	
Confirmation Number:	1045
Title of Invention:	AGGREGATE TRANSFERRING SYSTEM
First Named Inventor/Applicant Name:	JASON BRENDEN
Customer Number:	40158
Filer:	Jeffrey A. Proehl/Wanita Jacobsma
Filer Authorized By:	Jeffrey A. Proehl
Attorney Docket Number:	58557
Receipt Date:	14-DEC-2022
Filing Date:	17-NOV-2022
Time Stamp:	09:51:27
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$250
RAM confirmation Number	E2022BD052513759
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		04982692.PDF	103266	yes	11
			b7779183a3bff5288d359fda276fc2fc928ac605		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Preliminary Amendment		1	1	
	Claims		2	10	
	Applicant Arguments/Remarks Made in an Amendment		11	11	
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	37941	no	2
			0a7a772e2531a39b09fe5ac6357a86f98a52c7f3		
Warnings:					
Information:					
Total Files Size (in bytes):			141207		

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 APPLICATION FEE DETERMINATION RECORD						Application or Docket Number 17/988,854																																																																
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APPLICATION AS FILED - PART I																																																																						
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SEARCH FEE (37 CFR 1.16(k), (l), or (m))		N/A		N/A	N/A	350		N/A																																																														
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		N/A		N/A	N/A	400		N/A																																																														
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INDEPENDENT CLAIMS (37 CFR 1.16(h))		1	minus 3 =	*		x =	0																																																															
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																																																																
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AMENDMENT A		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)																																																												
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(Column 1) (Column 2) (Column 3) <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="5" style="text-align: center; font-size: small; writing-mode: vertical-rl; transform: rotate(180deg);">AMENDMENT B</td> <td></td> <td style="text-align: center; font-size: small;">CLAIMS REMAINING AFTER AMENDMENT</td> <td></td> <td style="text-align: center; font-size: small;">HIGHEST NUMBER PREVIOUSLY PAID FOR</td> <td style="text-align: center; font-size: small;">PRESENT EXTRA</td> <td style="text-align: center; font-size: small;">RATE(\$)</td> <td style="text-align: center; font-size: small;">ADDITIONAL FEE(\$)</td> <td></td> <td style="text-align: center; font-size: small;">RATE(\$)</td> <td style="text-align: center; font-size: small;">ADDITIONAL FEE(\$)</td> </tr> <tr> <td style="font-size: x-small;">Total (37 CFR 1.16(i))</td> <td style="text-align: center;">*</td> <td style="text-align: center;">Minus</td> <td style="text-align: center;">**</td> <td style="text-align: center;">=</td> <td style="text-align: center;">x =</td> <td></td> <td style="text-align: center;">OR</td> <td style="text-align: center;">x =</td> <td></td> </tr> <tr> <td style="font-size: x-small;">Independent (37 CFR 1.16(h))</td> <td style="text-align: center;">*</td> <td style="text-align: center;">Minus</td> <td style="text-align: center;">***</td> <td style="text-align: center;">=</td> <td style="text-align: center;">x =</td> <td></td> <td style="text-align: center;">OR</td> <td style="text-align: center;">x =</td> <td></td> </tr> <tr> <td colspan="5" style="font-size: x-small;">Application Size Fee (37 CFR 1.16(s))</td> <td></td> <td></td> <td style="text-align: center;">OR</td> <td></td> <td></td> </tr> <tr> <td colspan="5" style="font-size: x-small;">FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))</td> <td></td> <td></td> <td style="text-align: center;">OR</td> <td></td> <td></td> </tr> <tr> <td colspan="5"></td> <td style="text-align: center;">TOTAL ADD'L FEE</td> <td></td> <td style="text-align: center;">OR</td> <td style="text-align: center;">TOTAL ADD'L FEE</td> <td></td> </tr> </table>										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 =		OR	x =		Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =		Application Size Fee (37 CFR 1.16(s))							OR			FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR								TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
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* 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.																																																																						





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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
17/988,854	11/17/2022		830	58557	17	1

40158

WOODS FULLER SHULTZ & SMITH P.C.

ATTN: JEFFREY A. PROEHL

P.O. BOX 5027

SIOUX FALLS, SD 57117

CONFIRMATION NO. 1045

UPDATED FILING RECEIPT



0000000051705231

Date Mailed: 12/14/2022

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)

JASON BRENDEN, ELK POINT, SD;
TYLER DEWITT, VERMILLION, SD;

Applicant(s)

JASON BRENDEN, ELK POINT, SD;
TYLER DEWITT, VERMILLION, SD;

Power of Attorney: None

Domestic Priority data as claimed by applicant

This application is a CON of 17/550,073 12/14/2021
which claims benefit of 63/223,124 07/19/2021

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: 11/30/2022

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 17/988,854**

Projected Publication Date: Request for Non-Publication Acknowledged

Non-Publication Request: Yes

Early Publication Request: No

**** SMALL ENTITY ****

Title

AGGREGATE TRANSFERRING SYSTEM

Preliminary Class

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

page 2 of 4

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).

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Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

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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).

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Appln. No. 17/988,854
Preliminary Amendment dated December 12, 2022
Reply to Notice mailed December 1, 2022

Attorney's Docket No. 58557

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re Patent Application of JASON BRENDEN et al.)
Serial No.: 17/988,854)
Filed: November 17, 2022)
For: AGGREGATE TRANSFERRING SYSTEM)
Examiner: (unassigned))
Group Art Unit: (unassigned))

Mail Stop: Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**APPLICANT RESPONSE TO NOTICE TO
FILE CORRECTED APPLICATION PAPERS**

Responsive to the "Notice To File Corrected Application Papers" for this application dated December 1, which objected to the specification on the basis that "[t]he line spacing on page(s) 30-31 of the specification is not 1 ½ or double spaced (see 37 CFR 1.52(b)). A proper substitute specification in compliance with 37 CFR 1.121 (b)(3) and 1.125, having the proper line spacing throughout, is required to satisfy this requirement. A statement that the substitute specification contains no new matter is required."

Submitted with this paper, please find the following:

- 1) a substitute specification in compliance with 37 CFR 1.121 (b)(3) and 1.125, providing a copy of the specification with the proper line spacing throughout. Per the Notice, a copy of the substitute specification is being submitted herewith in clean form only.
- 2) No new matter has been added.

Appln. No. 17/988,854
Preliminary Amendment dated December 12, 2022
Reply to Notice mailed December 1, 2022

CONCLUSION

It is believed that the drawings submitted herewith addresses and corrects the matters mentioned in the Notice, and early consideration of the Application is courteously solicited.

Respectfully submitted,

WOODS, FULLER, SHULTZ & SMITH P.C.

/Jeffrey A. Proehl/ **Date:** December 12, 2022
Jeffrey A. Proehl (Reg. No. 35,987)
Customer No. **40,158**
P.O. Box 5027
Sioux Falls, SD 57117-5027
(605)336-3890 FAX (605)339-3357

AGGREGATE TRANSFERRING SYSTEM

REFERENCE TO RELATED APPLICATIONS

5

This application claims the benefit of the priority of U.S. Provisional Patent Application No. 63/223,124, filed July 19, 2021, which is hereby incorporated by reference in its entirety.

10 BACKGROUND

Field

15 The present disclosure relates to material handling apparatus and more particularly pertains to a new aggregate transferring system for receiving aggregate from a vehicle and elevating the aggregate to a higher vertical level for deposit into, for example, a silo.

20 SUMMARY

The present disclosure relates to an aggregate transferring apparatus for elevating and transferring aggregate. The apparatus may comprise a base assembly for receiving aggregate to be
25 conveyed by the transferring apparatus. The base assembly may include a base frame being elongated along a longitudinal axis and having a leading end and a trailing end, an unloader structure mounted on the base frame to receive aggregate from a vehicle at least partially positioned over the base frame, and a base conveyor

mounted on the base frame and extending along a longitudinal portion of the base frame between the leading and trailing ends of the base frame. A portion of the base conveyor may be positioned adjacent to the unloader structure to receive aggregate from the vehicle positioned over the base frame. The aggregate transferring apparatus may further comprise an aggregate elevating assembly for elevating aggregate from the base assembly. The aggregate elevating assembly may include a deployable frame mounted on the base frame and being movable between a storage position and a deploy position, with the storage position corresponding to a transport configuration of the apparatus and the deploy position corresponding to an operational configuration of the apparatus. Further, the deployable frame may be elongated with a base end and a free end. The aggregate elevating assembly may further include an elevating conveyor configured to receive aggregate from the base conveyor and convey the aggregate upwardly from the base assembly toward the free end of the deployable frame. The aggregate transferring apparatus may also comprise a conveyor extension assembly for conveying aggregate to locations horizontally outward from the aggregate elevating assembly. The conveyor extension assembly may include an extension conveyor for moving aggregate from an inlet of the extension conveyor to an outlet of the extension conveyor at a location outward from the aggregate elevating assembly. The extension conveyor may be movable with respect to the aggregate elevating assembly between a lowered position corresponding to the transport configuration of the apparatus and a raised position corresponding to the operational configuration of the apparatus. The lowered position may be characterized by the extension conveyor being positioned adjacent to the deployable frame of the aggregate elevating assembly, and

the raised position may be characterized by the extension conveyor being positioned generally away from the deployable frame of the aggregate elevating assembly. The extension conveyor may be articulated between the inlet and outlet with an inboard segment and an outboard segment. The inboard segment may be pivotally connected to the deployable frame of the aggregate elevating assembly by an inboard pivot, and the outboard segment may be pivotally connected to the inboard segment by an outboard pivot.

There has thus been outlined, rather broadly, some of the more important elements of the disclosure in order that the detailed description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are additional elements of the disclosure that will be described hereinafter and which will form the subject matter of the claims appended hereto.

In this respect, before explaining at least one embodiment or implementation in greater detail, it is to be understood that the scope of the disclosure is not limited in its application to the details of construction and to the arrangements of the components, and the particulars of the steps, set forth in the following description or illustrated in the drawings. The disclosure is capable of other embodiments and implementations and is thus capable of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein are for the purpose of description and should not be regarded as limiting.

As such, those skilled in the art will appreciate that the conception, upon which this disclosure is based, may readily be

utilized as a basis for the designing of other structures, methods
and systems for carrying out the several purposes of the present
disclosure. It is important, therefore, that the claims be regarded
as including such equivalent constructions insofar as they do not
5 depart from the spirit and scope of the present disclosure.

The advantages of the various embodiments of the present
disclosure, along with the various features of novelty that
characterize the disclosure, are disclosed in the following
10 descriptive matter and accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

The disclosure will be better understood and when
15 consideration is given to the drawings and the detailed description
which follows. Such description makes reference to the annexed
drawings wherein:

Figure 1A is a schematic perspective view of a new aggregate
20 transferring system according to the present disclosure shown with
respect to silos depicted in broken lines.

Figure 1B is a schematic top view of a new aggregate
transferring system according to the present disclosure shown with
25 respect to silos depicted in broken lines.

Figure 2A is a schematic side view of the aggregate transfer
apparatus shown in a transport or travel configuration and attached
to a towing vehicle, according to an illustrative embodiment.

30

Figure 2B is a schematic top view of the aggregate transfer
apparatus in the travel configuration, according to an illustrative
embodiment.

Figure 3 is a schematic side view of a forward portion of the aggregate transfer apparatus in the travel configuration, according to an illustrative embodiment.

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Figure 4 is a schematic rear end view of the aggregate transfer apparatus in an operational configuration, according to an illustrative embodiment.

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Figure 5A is a schematic side view of the aggregate transfer apparatus raised out of the transport configuration into a first position, according to an illustrative embodiment.

Figure 5B is a schematic side view of the aggregate transfer apparatus raised out of the transport configuration into a second position, according to an illustrative embodiment.

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Figure 5C is a schematic side view of the aggregate transfer apparatus raised out of the transport configuration in a fourth position, according to an illustrative embodiment.

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Figure 5D is a schematic side view of the aggregate transfer apparatus in an operational configuration, according to an illustrative embodiment.

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Figure 6 is a schematic perspective view of a forward portion of the aggregate transfer apparatus in the operational configuration including the unloader structure of the base assembly shown in an operational condition, according to an illustrative embodiment.

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Figure 7A is a schematic perspective view of a rearward portion of the aggregate transfer apparatus in the operational

configuration including the aggregate elevating assembly, according to an illustrative embodiment.

Figure 7B is a schematic second perspective view of the rearward portion of the aggregate transfer apparatus shown in Figure 7A, according to an illustrative embodiment.

Figure 8A is a schematic side view of an upper portion of the aggregate transfer apparatus in the operational configuration with the extension conveyor shown in the raised position, according to an illustrative embodiment.

Figure 8B is a schematic perspective view of the upper portion of the aggregate transfer apparatus in the operational configuration with the extension conveyor shown in the raised position, according to an illustrative embodiment.

Figure 8C is a schematic second perspective view of the upper portion of the aggregate transfer apparatus in the operational configuration with the extension conveyor shown in the raised position, according to an illustrative embodiment.

Figure 8D is a schematic perspective view of the inboard segment of the extension conveyor of the aggregate transfer apparatus, according to an illustrative embodiment.

Figure 8E is a schematic perspective view of the outboard segment of the extension conveyor of the aggregate transfer apparatus, according to an illustrative embodiment.

Figure 8F is a schematic perspective view of the chute of the extension conveyor of the aggregate transfer apparatus, according to an illustrative embodiment.

Figure 9 is a schematic block diagram of elements of control-related elements of the aggregate transfer apparatus, according to an illustrative embodiment.

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DETAILED DESCRIPTION

With reference now to the drawings, and in particular to Figures 1 through 9 thereof, a new aggregate transferring system
10 embodying the principles and concepts of the disclosed subject matter will be described.

The applicants have recognized that an apparatus for transferring aggregate, such as from a vehicle to a storage silo,
15 would be particularly advantageous if the apparatus had the capability to deploy itself at the location of transfer without the need for any significant assistance from other apparatus, such as cranes or telescopic handlers (e.g., “tele-handlers”). The ability of the apparatus to “self deploy” can minimize the complexity of the
20 deployment operation by eliminating any need to provide the additional apparatus at a work site, likely reducing the number of personnel involved in the deployment operation, as well as eliminating the need to coordinate the movements of the additional apparatus with respect to the aggregate transferring apparatus (as
25 well as the dangers inherent with such coordination). Moreover, the applicants have also recognized the advantages provided by an aggregate transfer apparatus which is highly integrated such that all of the major components of the apparatus are able to be transported as a unit between locations without elements being hauled by
30 separate transport.

In one aspect, the disclosure relates to an aggregate transferring apparatus 10 for transferring aggregate, as will be illustratively described. The apparatus 10 is suitable for performing the transfer of aggregate from one location to another, such as, for example, from a vehicle carrying the aggregate to a silo 1 for storing the aggregate. Illustratively, the aggregate transferring apparatus 10 may be utilized for transferring an aggregate such as sand, and in some implementations the sand may be of the type utilized in the process of hydraulic fracturing in connection with subterranean petroleum drilling. The vehicle may comprise a truck suitable for carrying the aggregate, and dumping or otherwise dispensing the aggregate, such as a bottom dump trailer. The silo may be positioned on the ground surface and may be vertically elongated with a top elevated above the ground surface, and the top have a port 2 which may be open, or openable (and closable), to receive the aggregate into the interior of the silo. In some applications, more than one silo may be grouped together adjacent to each other, such as in a two silo wide by three silo length array.

The aggregate transferring apparatus 10 may have an operational configuration (see, e.g., FIGS. 1A, 1B, 4, 5D, 7A, 7D, and 8A through 8F) in which the apparatus is configured to receive the aggregate, and then transport or convey the aggregate to a position elevated above the ground surface so that the aggregate may be dispensed into a silo, such as through the open top of the silo. The aggregate transferring apparatus 10 may also have a transport or travel configuration (see, e.g., FIGS. 2A, 2B and 3) in which the apparatus is suitable to be moved from one location to another, such as by towing the apparatus over roads and highways. In general, in the operational configuration, the apparatus may be

relatively extended and expanded, while in the transport configuration the apparatus may be relatively collapsed and compact to facilitate movements on roads.

5 In greater detail, the aggregate transferring apparatus 10 may include a base assembly 12 for receiving aggregate to be conveyed by the transferring apparatus and forming the portion of the apparatus 10 generally extending along and engaging the ground surface, particularly in the operational configuration. The base
10 assembly 12 may comprise a base frame 14 which may be elongated along a longitudinal axis 16 of the frame 14 and the assembly 12. The base frame 14 has a leading end 18 and a trailing end 19, with the leading end being generally oriented toward the normal direction of movement of the apparatus 10 when the apparatus is
15 being moved in the transport configuration. The frame 14 may have a leading portion 20 which includes the leading end 18 as well as the portion of the base frame adjacent to the leading end, a trailing portion 22 which includes the trailing end 19 as well as the portion of the base frame adjacent to the trailing end. The base frame 14
20 may also include a medial portion 24 which is positioned between the leading 20 and trailing 22 portions.

 The base assembly 12 may also include at least one axle 26 which is mounted on the base frame 14, and a pair of wheels 28
25 which are mounted on opposite ends of the axle 26. Typically, to enhance the move ability of the apparatus 10 over highways, the base assembly will include a plurality of axles positioned along the base frame in the longitudinal direction of the base frame. Illustratively, the plurality of axles 26 and corresponding wheels 28
30 are located on the medial portion 24 of the base frame. In some embodiments, the axles are mounted on the base frame 14 utilizing

one or more tandem walking beams, although other suspension structures may be utilized.

5 In some embodiments, the base assembly 12 may include an outrigger structure 30 mounted on the base frame 14 for enhancing the stability of the operational configuration of the apparatus 10, as well as the stability as the apparatus moves between the operational and transport configurations. The outrigger structure 30 may be positioned on the base frame 14 toward the trailing end 19, such as
10 on the trailing portion 22 of the frame 14. The outrigger structure 30 may be movable with respect to the base frame 14, and may be movable between a stabilizing condition (see, e.g., FIGS. 1A, 1B and 4) and a non-stabilizing condition (see, e.g., FIGS. 2A, 2B and 3). In general, the non-stabilizing condition of the outrigger
15 structure 30 may correspond to the transport configuration of the apparatus 10 while the stabilizing condition of the structure 30 may correspond to the operational configuration of the apparatus. The stabilizing condition of the outrigger structure 30 may also be utilized when the apparatus 10 is moving from the transport
20 condition to the operational condition, and also when the apparatus 10 is moving from the operational condition to the transport condition.

In some greater detail, the outrigger structure 30 may include
25 at least one outrigger arm 32 which is mounted on the base frame 14, and the outrigger arm may be pivotable with respect to the base frame. The outrigger arm 32 may be oriented substantially perpendicular to the longitudinal axis 16 of the base frame in the stabilizing condition of the outrigger structure, and may be oriented
30 substantially parallel to the longitudinal axis in the non-stabilizing condition of the outrigger structure. In some of the most preferable

embodiments, a pair of the outrigger arms 32, 34 is utilized and each arm is pivotally mounted on the base frame. The pair of outrigger arms 32, 34 may extend in substantially opposite directions from each other in the stabilizing condition and the arms
5 may extend substantially parallel to each other in the non-stabilizing condition. Further, the pair of outrigger arms 32, 34 may be positioned astride of the wheels 28 on the axles when the outrigger structure is in the non-stabilizing condition.

10 The outrigger structure 30 may further include at least one outrigger leg 33 that is configured to extend downwardly from one of the outrigger arms 32, 34 to contact the ground surface below the outrigger arm. The outrigger leg 33 may have an extended position in which the leg 33 is extended away from the outrigger arm toward
15 the ground surface to contact the ground surface for providing stability to the apparatus 10. The outrigger leg 33 may also have a retracted position in which the leg 33 is retracted toward the outrigger arm and away from the ground surface. A pair of the outrigger legs 33 may be provided, with each outrigger leg being
20 mounted on one of the outrigger arms 32, 34. The extended position of the outrigger legs 33 may correspond to the deployed mode of the apparatus 10 and the retracted position of the outrigger leg may correspond to the storage mode of the apparatus. An outrigger leg actuator 35 may be provided for each outrigger leg 33
25 to move the outrigger leg between the extended position and the retracted position, and the actuator 35 may be connected to the outrigger arm and the outrigger leg to act between the arm and leg.

30 Additionally, at least one stabilizing leg 36 may be provided that is extendable downwardly from the base frame 14 to contact the ground surface below the apparatus 10. The stabilizing leg 36

may have an extended position in which the leg 36 is extended away from the base frame 14 toward the ground surface to contact with the ground surface and a retracted position in which the leg 36 is retracted toward the base frame and away from the ground surface.

5 A plurality of the stabilizing legs 36 may be utilized, and may include a pair of the stabilizing legs each being mounted on the base frame 14. The pair of stabilizing legs 36 may be located toward the trailing end 19 of the base frame, and may be laterally offset from a central longitudinal axis of the base frame, such as
10 or locations between the outrigger legs 33 mounted on the outrigger arms 32, 34 (see, e.g., FIG. 4). The extended position of the stabilizing legs 36 may correspond to the deployed mode of the apparatus and the retracted position of the stabilizing legs may correspond to the storage mode of the apparatus. A stabilizing leg
15 actuator 37 being configured to move the at least one stabilizing leg between the extended position in the retracted position, the stabilizing leg actuator acting between the base frame and the stabilizing leg,

20 The base assembly 12 may further comprise an unloader structure 40 for receiving the aggregate from the vehicle carrying the aggregate to the apparatus 10. The unloader structure 40 may be mounted on the base frame 14, and may be positioned toward the leading end 18 of the frame 14 and on the leading portion 20 of the
25 frame (but also may be spaced from the leading end of the frame). The unloader structure 40 may have a transport condition and an operational condition, with the transport condition generally corresponding to the transport configuration of the apparatus 10 and the operational condition generally corresponding to the
30 operational configuration of the apparatus. The unloader structure 40 may include a pair of ramps 42, 44 mounted on the base frame

14, with each of the ramps being pivotable with respect to the base frame. In the operational condition, the ramps 42, 44 may extend laterally from the base frame 14 in substantially opposite directions in the operational condition, and may be oriented substantially horizontally for contacting the ground surface. In the transport condition, the ramps may be oriented substantially parallel with respect to each other, and may extend substantially vertically upwardly from the base frame 14. Illustratively, each of the ramps 42, 44 may comprise a pair of ramp portions 46, 47 positioned adjacent to each other, although a ramp comprised of a single ramp portion may also be utilized. Each of the ramps 42, 44, and ramp portions 46, 47 if utilized, may have a position corresponding to the transport condition of the unloader structure 40 and also have a position corresponding to the operational condition of the unloader structure. At least one ramp actuator 45 may be provided which is configured to move at least one of the ramps between the position corresponding to the transport condition and the position corresponding to the operational condition. Typically, a plurality of the ramp actuators 45 may act on the ramps 42, 44 (and ramp portions 46, 47 if utilized) to move the ramps, and/or the portions of the ramps, between the positions corresponding to the transport and operational conditions of the unloader structure.

The unloader structure 40 may further include a grate 48 mounted on the base frame 14 that may be substantially horizontally oriented and positioned between the pair of ramps 42, 44, and at least a portion of the grate may be reticulated with holes to permit aggregate landing on the grate to pass through the grate.

Further included in the base assembly 12 may be a base conveyor 50 mounted on the base frame 14 and which extends along

a longitudinal portion of the base frame between the leading 18 and trailing ends of the base frame. The base conveyor 50 may tend to move aggregate falling onto the conveyor toward the trailing end 19 of the frame 14. The base conveyor 50 may have a receiving end 52
5 and a dispensing end 54, with the receiving end being located toward the leading end 18 and the dispensing end being located toward the trailing end 19 of the base frame. The base conveyor 50 may comprise a base conveyor belt 56 for carrying aggregate away from the unloader structure 40, and at least a portion of the belt 56
10 may be positioned below the grate 48 such that gravity moves the aggregate through the grate and onto an upper stretch or portion of the belt supporting aggregate being carried by the belt. The base conveyor 50 may have a plurality of support rollers 58 which are mounted on the base frame 14 and extend laterally with respect to
15 the longitudinal axis 16 of the base frame to support the upper stretch of the base conveyor belt.

The aggregate transferring apparatus 10 may further include an aggregate elevating assembly 60 for elevating aggregate received
20 from the base assembly to a relatively higher vertical level or elevation above the ground surface. The aggregate elevating assembly 60 may include a deployable frame 62 which is movably mounted on the base assembly 12. The deployable frame 62 may be mounted on the base frame 14, and may be located toward the
25 trailing end 19. The deployable frame 62 may be elongated with a base end 64 and a free end 66, with the base end being mounted on the base assembly 12. The deployable frame 62 may be movable between a storage position generally corresponding to the transport configuration of the apparatus 10, and a deploy position generally
30 corresponding to the operational configuration of the apparatus. The storage position of the deployable frame 62 may be

characterized by the frame 62 being substantially horizontally oriented and generally parallel to the base frame 14 and the ground surface. The deploy position of the deployable frame 14 may be characterized by the frame 14 being oriented substantially vertical,
5 and oriented substantially perpendicular to the base frame 16 and the ground surface. In illustrative embodiments, the deployable frame 62 comprises a truss frame with a space frame about a substantially hollow interior.

10 The aggregate elevating assembly 60 may also include trailer structure 70 which is configured to provide trailer functionality to the elevating assembly, and by extension the aggregate transferring apparatus 10, when the apparatus 10 is in the transport configuration such that the apparatus 10 may be towed across the
15 ground surface. The trailer structure 70 may be positioned adjacent to, and typically in contact with, the ground surface when the deployable frame is in the storage position (and other elements of the apparatus 10 are in the transport configuration). In greater detail, the trailer structure 70 may include at least one landing leg
20 72 mounted on the deployable frame 62 to rest upon the ground surface when the deployable frame is in the storage position, and the leg may extend outwardly from the frame 62. Typically, a pair of the landing legs 72, 74 may be utilized with each of the legs having similar orientation with respect to the frame 62. The trailer
25 structure 70 may further include a kingpin 76 mounted on the deployable frame 62 which is able to engage the fifth wheel hitch structure of a vehicle, such as a semi-tractor, for towing the apparatus 10 in the transport configuration. The kingpin 76 may be located toward the free end 66 of the deployable frame 62, and may
30 be directed in the same direction as the landing leg or legs such that the kingpin and the landing legs are directed downwardly

toward the ground surface when the apparatus 10 is in the transport configuration. In some embodiments, the free end 66 of the deployable frame 62 may extend beyond the leading end 18 of the base frame 14 when the deployable frame is in the storage position
5 so that the trailer structure is able to move past the base assembly 12 and engage the ground surface.

The aggregate elevating assembly 60 may further include an elevating conveyor 80 for conveying aggregate upwardly from the
10 base assembly 12. The elevating conveyor 80 may extend longitudinally with respect to the deployable frame 62, and may extend from the base end 64 to the free end 66 of the frame 62. The elevating conveyor 60 may be configured to receive aggregate from the base conveyor, and may have an intake 82 and an output
15 84. The intake 82 may be being located toward the base end 64 of the deployable frame 62 and also may be located adjacent to the dispensing end 54 of the base conveyor 50 to receive aggregate from the conveyor 50. The output 84 may be located toward the free end 66 of the deployable frame, and may be configured to
20 output the conveyed aggregate on the side of the frame 62 that is opposite of the side of the frame 62 at which the intake is located. In some embodiments, the elevating conveyor 80 may comprise a bucket conveyor, and the conveyor 80 may be at least partially within the truss frame of the deployable frame 62. Illustratively,
25 the elevating conveyor 8 may have a length of support of 70 feet or more.

The aggregate transferring apparatus 10 may also include a frame deployment assembly 90 which is configured to move the
30 deployable frame 62 of the elevating assembly 60 with respect to the base frame 14 of the base assembly 12. The frame deployment

assembly 90 may be configured to move the deployable frame between the storage and deploy positions for converting the apparatus 10 between the transport and operational configurations. The frame deployment assembly 90 may be mounted on the base
5 frame 14 and the deployable frame 62.

In illustrative embodiments, the frame deployment structure 90 may comprise at least one lift arm structure 92 mounted on the base frame 16 and the deployable frame 62 which may form a
10 linkage between the base frame and the deployable frame. Illustratively, the frame deployment assembly 90 may include a pair of the lift arm structures 92, 94 mounted on the base 14 and deployable 62 frames. In general, the pair of lift arm structures 92, 94 may be laterally spaced with respect to the longitudinal axis 16
15 of the base frame, and may be located on opposite lateral sides of the deployable frame 62. Each of the lift arm structures 92, 94 may have a first end 96 which is mounted on a base mount point 98 on the base frame 14 which may permit pivotal movement of the first end 96 with respect to the base mount point 98. Further, each of
20 the lift arm structures 92, 94 may have a second end 100 mounted on an upper mount point 102 on the deployable frame 62. The upper mount point 102 may include a cross-member 104 that extends between the pair of lift arm structures 92, 94 and that is mounted on the deployable frame.

25 In some embodiments, each of the lift arm structures 92, 94 may be articulated between the first 96 and second 100 ends such that the structures 92, 94 articulate as the deployable frame 62 moves between the storage and deploy positions and the apparatus
30 10 moves between the transport and operational configurations. Each of the lift arm structures 92, 94 may include a first link

member 106 and a second link member 108 which are pivotally mounted together. The first link member 106 may have the first end 96 of the respective lift arm structure, and the first link member may be pivotally mounted on the base mount point 98 to pivot with respect to the base frame 14. The first link member 106 may be elongated in shape and have a first intermediate end 110 located on the member 106 opposite of the first end 96 of the lift arm structure. Illustratively, the first link member 106 may be formed by a bar. The second link member 108 may have the second end 100 of the respective lift arm structure, and the second link member may be pivotally mounted on the upper mount point 102 to pivot with respect to the deployable frame 62. The second link member 108 may be elongated in shape and have a second intermediate end 112 located on the member 108 opposite of the second end 100 of the lift arm structure. The second intermediate end 112 of the second link member may be pivotally mounted to the first intermediate end 110 of the first link member. The second link member may form a medial mount point 114. Illustratively, the second link member 108 may comprise a bar and a weldment.

20 The frame deployment structure 90 may further include lift actuator 116 which acts on at least one of the lift arm structures 92, 94. The lift actuator 116 may be mounted on the base frame 14 and the respective lift arm structure, and may be mounted on the base mount point 98 on the base frame and the medial mount point 114 on the second link member 108 of the respective lift arm structure. The lift actuator 116 may be extendable and retractable in length to move the second link member 108 with respect to the base frame. Illustratively, the lift actuator may comprise a hydraulic actuator, 30 although other types of actuators may also be employed.

The aggregate transferring apparatus 10 may further include a conveyor extension assembly 120 for conveying aggregate to locations horizontally outward from the aggregate elevating assembly 60, such as, for example, one or more silos to which the apparatus 10 is positioned adjacent. The conveyor extension assembly 120 may include an extension conveyor 122 for moving aggregate from the aggregate elevating assembly 60 to a location outward from the assembly 60. The extension conveyor 122 may be movable with respect to the elevating assembly 60, and may be extendable outwardly from the assembly 60 in a substantially horizontal orientation. The extension conveyor 122 may be movable between a lowered position (see. e.g., FIG. 2A) and a raised position (see. e.g., FIG. 5D). FIGS. 5A through 5C illustrate three illustrative intermediate positions of the extension conveyor 122 between the lowered position of FIG. 2A and the raised position of FIG. 5D. The lowered position of the extension conveyor 122 may correspond to the transport configuration of the apparatus 10, and the raised position of the conveyor 122 may correspond to an operational configuration of the apparatus. The lowered position may be further characterized by the extension conveyor 122 being positioned adjacent to the deployable frame 62 of the aggregate elevating assembly 60, and the extension conveyor may be oriented substantially parallel to the deployable frame 62 in the lowered position. The raised position of the conveyor 122 may also be characterized by the extension conveyor being positioned generally away from the deployable frame 62, and the extension conveyor may be cantilevered outwardly from the deployable frame in the raised position. The raised position of the extension conveyor 122 may further be characterized by the conveyor 122 being oriented substantially perpendicular to the deployable frame

62 of the aggregate elevating assembly. As illustrated in FIGS. 5A through 5D, the extension conveyor 122 may be maintained in a substantially horizontal orientation (e.g., substantially parallel to the base frame 14) as the deployable frame 62 of the elevating assembly 60 is raised from the storage position to the deploy position, and similarly the conveyor 122 may be maintained and the substantially horizontal orientation as the frame 62 is lowered from the deploy position to the storage position.

The extension conveyor 122 may have an inlet 124 for receiving aggregate from the aggregate elevating assembly 60 and an outlet 126 for dispensing aggregate from the extension conveyor to a desired location, such as into the port 2 at the top of a silo.

The conveyor extension assembly 120 may comprise an inboard segment 130 and an outboard segment 132, with the inboard and outboard segments being articulated with respect to each other to permit adjustment of the position of the outlet 126 with respect to the inlet 124 including the effective distance between the outlet 126 and the inlet 124. The inboard segment 130 may be pivotally connected to the deployable frame 62 of the aggregate elevating assembly by an inboard pivot 134, which may permit pivoting of the inboard segment 130 with respect to the deployable frame about a substantially vertical axis. The outboard segment 132 may be pivotally connected to the inboard segment 130 by an outboard pivot 136, which may permit pivoting of the outboard segment 132 with respect to the inboard segment 130 about a substantially vertical axis. The inboard segment 130 has a first inboard segment end 138 mounted on the deployable frame 62, and may be configured to receive aggregate from the output 84 of the elevating conveyor 80. The inboard segment 130 may also have a second

inboard segment end 140 which is located opposite of the first inboard segment end 138 on the segment 130, and may also be located at the outboard pivot 136. The outboard segment 132 has a first outboard segment end 142 which is located at the outboard pivot 136 and which may be pivotally mounted on the second inboard segment end 140 of the inboard segment 130. The outboard segment 132 has a second outboard segment end 144 which is located opposite of the first outboard segment end 142, and the outlet 126 of the extension conveyor may be located at the second outboard segment end. Movement of the inboard segment with respect to the deployable frame at the inboard pivot, and the outboard segment with respect to the inboard segment at the outboard pivot, may be accomplished using any suitable mechanism. In some embodiments, an inboard pivot actuator 135 may be configured to pivot the inboard segment 130 with respect to the deployable frame 62, and the inboard pivot actuator may act between the deployable frame and the truss frame of the inboard segment. Additionally, an outboard pivot actuator 137 may be configured to pivot the outboard segment 132 with respect to the inboard segment 130, and the outboard pivot actuator may act between the inboard and outboard segments. Illustratively, the inboard pivot actuator 135 and the outboard pivot actuator 137 may comprise, such as, for example, a slew drive mechanism which may be highly suitable for permitting transfer of aggregate from the elevating conveyor 80 to inboard segment 130 of the extension conveyor 122, and from the inboard segment to the outboard segment 132 of the extension conveyor.

Each of the inboard 130 and outboard 132 segments may have substantially similar constructions. Illustratively, each segment may include a truss frame 146 and a plurality of support rollers 148

rotatably mounted on the truss frame 146. Each segment may further include a conveyor belt 150 which may be an endless belt supported on the support rollers 148, and an upper wall 152 may be mounted on the truss frame in a position above the conveyor belt to
5 at least partially cover an upper stretch of the conveyor belt as well is aggregate carried by the upper stretch.

In some embodiments, when in the transport configuration of the apparatus 10, the inboard segment 130 of the extension
10 conveyor 122 may be positioned over a portion of the deployable frame 62 of the aggregate elevating assembly, and the outboard segment 132 of the extension conveyor may be positioned laterally alongside a portion of the deployable frame 62.

15 The conveyor extension assembly 120 may also comprise a conveyor support frame 154 for supporting the segments 130, 132 of the extension conveyor on the aggregate elevating assembly 60. The conveyor support frame 154 may be movable with respect to the deployable frame 62 of the elevating assembly when the extension
20 conveyor 122 moves between the lowered and raised positions, and the conveyor support frame may be pivotally mounted on the deployable frame to permit pivoting of the support frame 154 with respect to the deployable frame about a substantially horizontal axis. The inboard segment 130 may be pivotally mounted on the
25 support frame by the inboard pivot 134. Illustratively, the conveyor support frame 154 may include a pair of lateral sections 156, 158 which are positionable on the lateral sides of the deployable frame 62, particularly when the extension conveyor 122 is in the lowered position.

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A conveyor extension assembly 120 may further comprise an extension conveyor lift structure 160 for moving the extension conveyor 122 between the lowered position and the raised position. The extension conveyor lift structure 160 may act on the conveyor support frame 154 and may be mounted on the conveyor support frame and the deployable frame 66. The extension conveyor lift structure 160 may comprise at least one extension actuator 162 which may be extendable to pivot the conveyor support frame 154 away from the deployable frame 62 and move the extension conveyor 122 to the raised position. The extension actuator 162 may be retractable to pivot the conveyor support frame 154 toward the deployable frame and move the extension conveyor 122 to the lowered position. In some highly preferred embodiments, a pair of the extension actuators 162 may be provided and may be positioned along the lateral side of the deployable frame.

The conveyor extension assembly 120 may further include an inboard conveyor motor 139 which is configured to move the conveyor belt of the inboard conveyor segment 130, and may be mounted on the truss frame of the inboard conveyor segment. Additionally, the conveyor extension assembly 120 may include an outboard conveyor motor 143 which is configured to move the conveyor belt of the outboard conveyor segment 132, and may be mounted on the truss frame of the outboard conveyor segment.

The conveyor extension assembly 120 may further include a chute 164 for receiving aggregate from the extension conveyor 122. The chute 164 may be mounted on the outboard segment 136 of the extension conveyor, and may be in communication with the outlet 126 of the conveyor 122 to receive aggregate from the conveyor. The chute 164 may be located at the second outboard segment end

144, and may extend downwardly from the outlet. The chute 164 may terminate in a spout 166 where the conveyed aggregate exits the chute. In some embodiments, the chute 164 may be extendable to selectively increase the length of the chute to permit the spout 166 at the end of the chute to be moved closer to (and optionally into) the port 2 at the top of the silo to reduce the potential generation of dust in the air, and then raise the spout 166 to permit the end to avoid contact with elements such as the perimeter wall of the silo while repositioning the chute to another silo or removing the chute from proximity to the silo grouping. The chute 164 may be movable between an extended condition (see, e.g., FIG. 8F) and a retracted condition (see, e.g., FIG. 3), and the spout 166 may have an extended position corresponding to the extended condition of the chute and a retracted position corresponding to the retracted condition of the chute. The retracted position of the spout 166 may be relatively closer to the outboard segment 132 of the extension conveyor 122 than the extended position of the spout. In embodiments, the chute 164 may be moved between the extended and retracted conditions by a chute actuator 168. Illustratively, the chute may be formed of a flexible material to permit portions of the chute to more readily pass over structures such as the tops of silos.

The apparatus 10 may further include a control assembly 170 for providing control and monitoring of various elements of the apparatus 10. The control assembly 170 may include a controller 172 which may automatically, or at the input of the operator, control elements of the apparatus. The control assembly 170 may also include manually-operated controls. Elements of the control assembly 170, such as the controller 172, may be located on a control panel 174 which may be positioned on the base frame 14 of the base assembly or any other suitable position which is accessible

by an operator (such as an operator standing on the ground surface adjacent to the apparatus). Various operator controls may be provided on the control panel 174 which directly or indirectly control the operation of elements of the apparatus 10. In addition
5 to the control panel 174, a remote control device 176 may be provided to control some or all of the functions of the apparatus 10 at a location away from the control panel 174, and the remote control device may communicate with the control panel through a wired or wireless communication connection. Advantageously, the
10 remote control device 176 may be configured to control elements or functions for which it is desirable that the operator and other personnel are located away from the control panel 174 for purposes of safety or observation.

15 The controller 172 may receive and process information from a plurality of sensors 178 of the apparatus 10, through one or more suitable interfaces. The plurality of sensors 184 may sense various conditions or positions of elements of the apparatus or the environment about the apparatus. The plurality of sensors may
20 include sensors for sensing conditions of various elements, such as a plurality of image sensors 180 positioned on the apparatus for capturing video or still images from perspectives on the apparatus. Illustratively, image sensors 176 may be positioned adjacent to the chute 164, and may be directed downwardly from the second
25 outboard segment end 140 for capturing images of the position of the spout 166 below with relation to, for example, the port 2 of a silo 1. Additionally, image sensors 176 may be positioned at other locations on the apparatus 10 where visual information would be helpful, such as, for example, the upper free end 66 of the
30 deployable frame 62 looking downwardly on the apparatus 10 using one or more of the image sensors. Images produced by the image

sensors may be displayed on a display screen or monitor. The control assembly 170 may further include sensors for sensing positions of various elements, such as a plurality of segment position sensors 182 for sensing positions of the inboard 130 and outboard 132 segments of the extension conveyor. Illustratively, each of the segment position sensors 178 may be located at one or all of the inboard 134 and outboard 136 pivots, and each position sensor may be associated with one of the pivot actuators 135, 137 to sense and communicate the relative positions of the elements connected at the respective pivot. For example, an encoder device may be associated with each slew drive mechanism of the pivot actuators.

Broadly, the control assembly 170 may also include elements of the apparatus 10 which receive commands or signals from the controller 172 (or operator- manipulated manual controls) in order to operate elements of the apparatus 10, such as the power control circuitry which provides electrical power to elements of the apparatus such as the motors and valves which control the supply of hydraulic fluid to elements of the apparatus such as hydraulic actuators.

The control assembly 170 may implement automatic or semi-automatic functionality in the operation of the various powered elements of the apparatus 10 to provide safety and convenience in the operation of the apparatus. As an example, for elements for which the initiation or termination of operation of the elements in a sequential manner is desirable or necessary, the controller 172 may be programmed to initiate or terminate the operation in the sequence in response to a single input or command from the operator. Further, memory 184 associated with the controller 172

may retain information for enabling repeated movements by or positioning of elements of the apparatus. For example, the relative positions of the inboard 134 and outboard 136 segments of the extension conveyor 122 corresponding to the loading of specific
5 silos in the silo array may be stored in memory 184 such that the controller 172 is able to recall the position and orientation information of the elements from the memory when invoked or requested by the operator in order for the controller to operate elements of the apparatus 10 to cause the chute 164 to be moved to
10 a location suitable to dispense aggregate to the identified silo of the array from the spout 166.

Another aspect of the disclosure is a method of setting up an apparatus, such as an apparatus of the type of the aggregate
15 transferring apparatus 10 of the disclosure, may include providing an apparatus which may have a base assembly including a base frame and an outrigger structure and an unloader structure, an aggregate elevating assembly including a deployable frame, a frame deployment assembly including at least one lift arm structure, a
20 conveyor extension assembly including an extension conveyor with an inboard segment, an outboard segment, and a chute, and a control assembly. The method may include identifying an area of ground surface for deployment of the apparatus, and that may include determining that the area of ground surface is substantially
25 level and is suitably compacted for bearing the weight of the apparatus. The identification of the area of ground surface may also include determining that a space about the area of ground surface is clear of obstructions for deploying elements of the apparatus such as, for example, the outrigger structure of the base
30 assembly and the deployable frame of the aggregate elevating assembly.

The method may also include positioning the apparatus 10 on the area of ground surface, which may involve towing the apparatus to the area of ground surface by a towing vehicle, such as a semi-tractor. The method may further include connecting a power source to the apparatus 10 to provide power to the control assembly 170 and the various elements of the control assembly. Such power source may be an electrical power source, and may involve the connection of an electrical power cord between the controller assembly 170 and an electrical power source.

Another aspect of the method may include removing the apparatus 10 from a travel configuration, or a configuration of the apparatus suitable for transporting the apparatus on roads and highways. This aspect of the method may include retracting a lift actuator 116 acting on at least one lift arm structure 92 of the flame deployment assembly 90 to move at least a portion of the base assembly 12 upwardly in a supportive manner to at least partially remove the weight of the base assembly 12 from travel binders 3 (see, e.g., FIG. 3) utilized to secure the base assembly and aggregate elevating assembly 60 together during transport in the travel configuration. This aspect of the method may also include removing the travel binders from the base assembly 12 and elevating assembly 60 after the retraction of the lift actuator 116. Removing the apparatus from the travel configuration may further include extending at least one landing leg 72 of the trailer structure 70 of the deployable frame 62 to contact the ground surface, and may involve engaging a brake on the wheels of the towing vehicle prior to extending the landing gear and disconnecting the apparatus from the power source after extending the landing gear. Removing the apparatus from the travel configuration may also include

extending the lift actuator 116 acting on the lift arm structure to permit the base assembly to contact the area of ground surface.

Another aspect of the method may include deploying the
5 outrigger structure 30 of the base assembly to contact the area of ground surface, and may involve swinging at least one outrigger arm 32 of the outrigger structure 30 outwardly from the non-stabilizing condition to the stabilizing condition, and may further involve extending one or more outrigger legs 33 associated with the
10 outrigger arm or arms 32 to contact the ground surface. Additionally, extending a stabilizer leg 36 to contact the ground surface may also be initiated. Extending of the outrigger leg 33 and the stabilizer leg 36 may be performed by operating the outrigger leg actuator 35 and the stabilizing leg actuator 37
15 (respectively).

In still another aspect of the method, the unloader structure 40 may be moved from the transport condition to the operational condition, which may involve deploying ramps of the unloader
20 structure. In greater detail, some implementations of this aspect may include removing travel restraint links from the ramps 42, 44 of the unloader structure, and pivoting the ramps from a position corresponding to the transport condition to a position corresponding to the operational condition. In embodiments in
25 which the ramps include multiple portions, the pivoting of the ramps may include pivoting the ramp portions of each ramp to the position corresponding to the operational condition.

A further aspect of the method may include deploying the
30 aggregate elevating assembly 60, which may involve rotating the deployable frame 62 upwardly into the deploy position of the frame

62, which may be performed while maintaining the inboard 130 and outboard 132 segments of the extension conveyor 122 in a substantially horizontal orientation as the deployable frame rotates into the deploy position. The deployment of the elevating assembly
5 60 may further include engaging lock pins to secure the deployable frame 62 in the deploy position, and attaching guy wires or cables to the frame 62 and the outrigger structure 30 such that the wires extend from the outrigger arms 32, 34 to on the frame 62 at locations spaced upwardly from the base end 64 of the frame 62. In
10 some implementations, the travel binders may be utilized to tension the guy wires.

Yet another aspect of the disclosure is a method of operating an apparatus, such as an apparatus of the type of the aggregate
15 transferring apparatus 10 of the disclosure. The method may include positioning the chute 164 over the port 2 of a silo to which the aggregate is to be transferred, and extending the chute so that the spout 166 of the chute moves into proximity of the port 2 of the silo, such as positioning the spout of the chute in the port. The
20 method may further include positioning an aggregate transporting vehicle on the unloader structure 40, which may involve moving a gate of the aggregate transporting vehicle into a position above the grate 48 of the unloader structure. The method may also include initiating operation of the extension conveyor 122, the elevating
25 conveyor 80, and the base conveyor 50, and may involve first initiating operation of the extension conveyor, then second initiating operation of the elevating conveyor, and then third initiating operation of the base conveyor.

30 Another aspect of the method of operating the apparatus may include unloading aggregate from the aggregate transporting vehicle

into the unloader structure 40, and moving the unloaded aggregate along the base conveyor 50 to the elevating conveyor 80, and along the elevating conveyor 80 to the extension conveyor 122, and along the extension conveyor 122 to the chute 164 of the extension conveyor. The method of operating the apparatus may also include periodically or occasionally relocating the chute 164 to the port 2 of another silo, and may involve emptying aggregate from the apparatus prior to the relocating movement, including emptying aggregate from the base conveyor, emptying aggregate from the elevating conveyor, and emptying aggregate from the extension conveyor. The relocation of the chute may also include retracting the chute to elevate the spout toward the retracted position, positioning the spout of the chute over a port 2 of another silo, and extending the chute to lower the spout toward the extended position adjacent to the second silo port. Further, the method may implement initiating operation of the conveyors of the apparatus, and may involve first initiating operation of the extension conveyor, then second initiating operation of the elevating conveyor, and then third initiating operation of the base conveyor, and unloading aggregate from the aggregate transporting vehicle into the unloader structure to move the aggregate from unloader structure of the base assembly to the spout of the conveyor extension assembly.

It should be appreciated that in the foregoing description and appended claims, that the terms “substantially” and “approximately,” when used to modify another term, mean “for the most part” or “being largely but not wholly or completely that which is specified” by the modified term.

It should also be appreciated from the foregoing description that, except when mutually exclusive, the features of the various

embodiments described herein may be combined with features of other embodiments as desired while remaining within the intended scope of the disclosure.

5 Further, those skilled in the art will appreciate that steps set forth in the description and/or shown in the drawing figures may be altered in a variety of ways. For example, the order of the steps may be rearranged, substeps may be performed in parallel, shown steps may be omitted, or other steps may be included, etc.

10 In this document, the terms "a" or "an" are used, as is common in patent documents, to include one or more than one, independent of any other instances or usages of "at least one" or "one or more." In this document, the term "or" is used to refer to a
15 nonexclusive or, such that "A or B" includes "A but not B," "B but not A," and "A and B," unless otherwise indicated.

 With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of the
20 disclosed embodiments and implementations, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art in light of the foregoing disclosure, and all
equivalent relationships to those illustrated in the drawings and
25 described in the specification are intended to be encompassed by the present disclosure.

 Therefore, the foregoing is considered as illustrative only of the principles of the disclosure. Further, since numerous
30 modifications and changes will readily occur to those skilled in the art, it is not desired to limit the disclosed subject matter to the exact construction and operation shown and described, and

accordingly, all suitable modifications and equivalents may be resorted to that fall within the scope of the claims.

Electronic Acknowledgement Receipt	
EFS ID:	47184904
Application Number:	17988854
International Application Number:	
Confirmation Number:	1045
Title of Invention:	AGGREGATE TRANSFERRING SYSTEM
First Named Inventor/Applicant Name:	JASON BRENDEN
Customer Number:	40158
Filer:	Jeffrey A. Proehl/Wanita Jacobsma
Filer Authorized By:	Jeffrey A. Proehl
Attorney Docket Number:	58557
Receipt Date:	12-DEC-2022
Filing Date:	17-NOV-2022
Time Stamp:	10:48:09
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Applicant Response to Pre-Exam Formalities Notice	04979053.PDF	79233	no	2
			fe67adde1b9c4b918d24be6ba39718cfd943220		

Warnings:

Information:					
2	Specification	04979077.PDF	16680353	no	33
			1c9f543c0b736950340d50cbb72d454fd6eb7c98		
Warnings:					
Information:					
Total Files Size (in bytes):				16759586	
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.					



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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
17/988,854	11/17/2022		830	58557	17	1

CONFIRMATION NO. 1045

FILING RECEIPT



0000000051248410

40158

WOODS FULLER SHULTZ & SMITH P.C.

ATTN: JEFFREY A. PROEHL

P.O. BOX 5027

SIOUX FALLS, SD 57117

Date Mailed: 12/01/2022

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)

JASON BRENDEN, ELK POINT, SD;
TYLER DEWITT, VERMILLION, SD;

Applicant(s)

JASON BRENDEN, ELK POINT, SD;
TYLER DEWITT, VERMILLION, SD;

Power of Attorney: None

Domestic Priority data as claimed by applicant

This application is a CON of 17/550,073 12/14/2021
which claims benefit of 63/223,124 07/19/2021

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: 11/30/2022

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 17/988,854**

Projected Publication Date: Request for Non-Publication Acknowledged

Non-Publication Request: Yes

Early Publication Request: No

**** SMALL ENTITY ****

Title

AGGREGATE TRANSFERRING SYSTEM

Preliminary Class

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

page 2 of 4

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).

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Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

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NOT GRANTED

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PATENT APPLICATION FEE DETERMINATION RECORD						Application or Docket Number 17/988,854					
Substitute for Form PTO-875											
APPLICATION AS FILED - PART I											
		(Column 1)	(Column 2)		SMALL ENTITY		OR	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	80		N/A			
SEARCH FEE (37 CFR 1.16(k), (l), or (m))		N/A		N/A	N/A	350		N/A			
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		N/A		N/A	N/A	400		N/A			
TOTAL CLAIMS (37 CFR 1.16(i))		17	minus 20 =	*	0	x	=	0	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))		1	minus 3 =	*		x	=	0			
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					
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))						0					
					TOTAL	830		TOTAL			
* 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		OR	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			
* 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.											
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			





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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
17/988,854	11/17/2022	JASON BRENDEN	58557

CONFIRMATION NO. 1045

40158
WOODS FULLER SHULTZ & SMITH P.C.
ATTN: JEFFREY A. PROEHL
P.O. BOX 5027
SIOUX FALLS, SD 57117

FORMALITIES LETTER



OC000000051248418

Date Mailed: 12/01/2022

NOTICE TO FILE CORRECTED APPLICATION PAPERS

Filing Date Granted

An application number and filing date have been accorded to the above-identified nonprovisional application. The application is informal since it does not comply with the regulations for the reason(s) indicated below. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

• **Specification Items**

The specification, claims, and/or abstract page(s) submitted is not acceptable because:

- The line spacing on page(s) 30-31 of the specification is not 1½ or double spaced (see 37 CFR 1.52(b)). A proper substitute specification in compliance with 37 CFR 1.121(b)(3) and 1.125, having the proper line spacing throughout, is required to satisfy this requirement. A statement that the substitute specification contains no new matter is required. However, a marked up version of the specification is not required for this correction.

Replies must be received in the USPTO within the set time period or must include a proper Certificate of Mailing or Transmission under 37 CFR 1.8 with a mailing or transmission date within the set time period. For more information and a suggested format, see Form PTO/SB/92 and MPEP 512.

Replies should be addressed to:

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

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A reply may be submitted via electronic filing only by registered users of the appropriate USPTO patent electronic filing system and must include:

- A separate document having the document description, "**Applicant response to Pre-Exam Formalities Notice**"; and
- the item(s) for which a reply period is set forth above.

For more information about electronic filing, contact the Patent Electronic Business Center (EBC) 1-866-217-9197 or visit <https://www.uspto.gov/ebc>

NOTE: If the reply is not being submitted electronically, a copy of this notice must be included.

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**.

/hsarwari/

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (01-22)

Approved for use through 05/31/2024. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	
	Filing Date	
	First Named Inventor	JASON BRENDEN
	Art Unit	
	Examiner Name	
	Attorney Docket Number	58557

U.S. PATENTS							Remove	
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear		
	1	9663303		2017-05-30	WALDNER			
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Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear		
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Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ² i	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		
	First Named Inventor	JASON BRENDEN	
	Art Unit		
	Examiner Name		
	Attorney Docket Number	58557	

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

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		
	First Named Inventor	JASON BRENDEN	
	Art Unit		
	Examiner Name		
	Attorney Docket Number	58557	

CERTIFICATION STATEMENT

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

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

OR

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



✕ See attached certification statement.

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

A certification statement is not submitted herewith.

SIGNATURE

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

Signature	/Jeffrey A. Proehl/	Date (YYYY-MM-DD)	2022-11-17
Name/Print	Jeffrey A. Proehl	Registration Number	35987

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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

Electronic Patent Application Fee Transmittal				
Application Number:				
Filing Date:				
Title of Invention:		AGGREGATE TRANSFERRING SYSTEM		
First Named Inventor/Applicant Name:		JASON BRENDEN		
Filer:		Jeffrey A. Proehl/Wanita Jacobsma		
Attorney Docket Number:		58557		
Filed as Small 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 FILING FEE (ELECTRONIC FILING)	4011	1	80	80
UTILITY SEARCH FEE	2111	1	350	350
UTILITY EXAMINATION FEE	2311	1	400	400
REQUEST FOR PRIORITIZED EXAMINATION	2817	1	2100	2100
Pages:				
Claims:				
Miscellaneous-Filing:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
PUBL. FEE- EARLY, VOLUNTARY, OR NORMAL	1504	1	0	0
PROCESSING FEE, EXCEPT PROV. APPLS.	2830	1	70	70
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				3000

Electronic Acknowledgement Receipt	
EFS ID:	47042170
Application Number:	17988854
International Application Number:	
Confirmation Number:	1045
Title of Invention:	AGGREGATE TRANSFERRING SYSTEM
First Named Inventor/Applicant Name:	JASON BRENDEN
Customer Number:	40158
Filer:	Jeffrey A. Proehl/Wanita Jacobsma
Filer Authorized By:	Jeffrey A. Proehl
Attorney Docket Number:	58557
Receipt Date:	17-NOV-2022
Filing Date:	
Time Stamp:	10:26:45
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$ 3000
RAM confirmation Number	E2022AGA28481907
Deposit Account	
Authorized User	

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

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Track One Request	04950040.PDF	114331	no	2
			c43482099d992a7320082326cd9918eb9e002e33		
Warnings:					
Information:					
2	Application Data Sheet	04950006.PDF	1255803	no	8
			15b7a5ae72e1b6f7ab0676ef4d37bbd74e8af75a		
Warnings:					
Information:					
3		04949853.PDF	152382	yes	40
			fb923bb0d86c76819ce9871f9e63a9605a562ae8		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Specification		1	32	
	Claims		33	39	
	Abstract		40	40	
Warnings:					
Information:					
4	Drawings-only black and white line drawings	04949852.PDF	4526731	no	20
			955c0d6eda0e893f25faa2665bc5628413f4cd5b		
Warnings:					
Information:					
5	Oath or Declaration filed	04949851.PDF	868235	no	3
			8e9d01fc127e6c600abb8a201f7be1ce3753c53f4		

Warnings:					
Information:					
6	Transmittal Letter	04950073.PDF	74925	no	2
			0d7132b74404e4b8a2787aff55d1a1d81ed71c62		
Warnings:					
Information:					
7	Information Disclosure Statement (IDS) Form (SB08)	04950064.PDF	1263267	no	4
			ae9920f9f69b25404c2f1237cd879266126b2897		
Warnings:					
Information:					
8	Fee Worksheet (SB06)	fee-info.pdf	50761	no	2
			6ca951a611b1df4507d16bde8f8482c199ff73d2		
Warnings:					
Information:					
Total Files Size (in bytes):			8306435		
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.					

**CERTIFICATION AND REQUEST FOR PRIORITIZED EXAMINATION
UNDER 37 CFR 1.102(e) (Page 1 of 1)**

First Named Inventor:	Jason Brenden	Nonprovisional Application Number (if known):	
Title of Invention:	Aggregate Transferring System		

APPLICANT HEREBY CERTIFIES THE FOLLOWING AND REQUESTS PRIORITIZED EXAMINATION FOR THE ABOVE-IDENTIFIED APPLICATION.

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:

I. ☒ Original Application (Track One) - Prioritized Examination under § 1.102(e)(1)

- i. (a) The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a). This certification and request is being filed with the utility application via EFS-Web.
---OR---
(b) The application is an original nonprovisional plant application filed under 35 U.S.C. 111(a). This certification and request is being filed with the plant application in paper.
- ii. An executed inventor's oath or declaration under 37 CFR 1.63 or 37 CFR 1.64 for each inventor, or the application data sheet meeting the conditions specified in 37 CFR 1.53(f)(3)(i) is filed with the application.

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

- i. A request for continued examination has been filed with, or prior to, this form.
- ii. If the application is a utility application, this certification and request is being filed via EFS-Web.
- iii. The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a), or is a national stage entry under 35 U.S.C. 371.
- iv. This certification and request is being filed prior to the mailing of a first Office action responsive to the request for continued examination.
- v. No prior request for continued examination has been granted prioritized examination status under 37 CFR 1.102(e)(2).

Signature <u>/Jeffrey A. Proehl/</u>	Date <u>2022-11-17</u>
Name (Print/Typed) <u>Jeffrey A. Proehl</u>	Practitioner Registration Number <u>35987</u>
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.*	
☐ *Total of _____ 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 in 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.

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.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	58557
		Application Number	
Title of Invention	AGGREGATE TRANSFERRING SYSTEM		
The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76. This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.			

Secrecy Order 37 CFR 5.2:

☐ Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

Inventor Information:

Inventor	1				<button>Remove</button>	
Legal Name						
Prefix	Given Name	Middle Name	Family Name	Suffix		
	JASON		BRENDEN			
Residence Information (Select One) ☒ US Residency ☐ Non US Residency ☐ Active US Military Service						
City	ELK POINT	State/Province	SD	Country of Residence	US	
Mailing Address of Inventor:						
Address 1	P. O. BOX 717					
Address 2						
City	ELK POINT	State/Province	SD			
Postal Code	57025	Country	US			
Inventor	2				<button>Remove</button>	
Legal Name						
Prefix	Given Name	Middle Name	Family Name	Suffix		
	TYLER		DEWITT			
Residence Information (Select One) ☒ US Residency ☐ Non US Residency ☐ Active US Military Service						
City	VERMILLION	State/Province	SD	Country of Residence	US	
Mailing Address of Inventor:						
Address 1	31286 BLUFF ROAD					
Address 2						
City	VERMILLION	State/Province	SD			
Postal Code	57069	Country	US			
All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the Add button. <button>Add</button>						

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below.
For further information see 37 CFR 1.33(a).

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.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	58557
		Application Number	
Title of Invention	AGGREGATE TRANSFERRING SYSTEM		

☐ An Address is being provided for the correspondence information of this application.

Customer Number	40158		
Email Address		Add Email	Remove Email

Application Information:

Title of the Invention	AGGREGATE TRANSFERRING SYSTEM		
Attorney Docket Number	58557	Small Entity Status Claimed	☒
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	20	Suggested Figure for Publication (if any)	

Filing By Reference:

Only complete this section when filing an application by reference under 35 U.S.C. 111(c) and 37 CFR 1.57(a). Do not complete this section if application papers including a specification and any drawings are being filed. Any domestic benefit or foreign priority information must be provided in the appropriate section(s) below (i.e., "Domestic Benefit/National Stage Information" and "Foreign Priority Information").

For the purposes of a filing date under 37 CFR 1.53(b), the description and any drawings of the present application are replaced by this reference to the previously filed application, subject to conditions and requirements of 37 CFR 1.57(a).

Application number of the previously filed application	Filing date (YYYY-MM-DD)	Intellectual Property Authority or Country

Publication Information:
☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☒ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and 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.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32). Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.

Please Select One:	☒ Customer Number	☐ US Patent Practitioner	☐ Limited Recognition (37 CFR 11.9)
Customer Number	40158		

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	58557
		Application Number	
Title of Invention	AGGREGATE TRANSFERRING SYSTEM		

Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, 365(c), or 386(c) or indicate National Stage entry from a PCT application. Providing benefit claim information in the Application Data Sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78.

When referring to the current application, please leave the "Application Number" field blank.

Prior Application Status	Pending	Remove	
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)
	Continuation of	17550073	2021-12-14
Prior Application Status	Expired	Remove	
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)
17550073	Claims benefit of provisional	63223124	2021-07-19
Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the Add button. Add			

Foreign Priority Information:

This section allows for the applicant to claim priority to a foreign application. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55. When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX)ⁱ the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(i)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

Application Number	Country ⁱ	Filing Date (YYYY-MM-DD)	Access Code ⁱ (if applicable)	Remove
Additional Foreign Priority Data may be generated within this form by selecting the Add button. Add				

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

☐ This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013.

NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	58557
		Application Number	
Title of Invention	AGGREGATE TRANSFERRING SYSTEM		

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.

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.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	58557
		Application Number	
Title of Invention	AGGREGATE TRANSFERRING SYSTEM		

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.				
Applicant	1			Remove
If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.				
Clear				
Assignee	Legal Representative under 35 U.S.C. 117		Joint Inventor	
Person to whom the inventor is obligated to assign.		Person who shows sufficient proprietary interest		
If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:				
Name of the Deceased or Legally Incapacitated Inventor:				
If the Applicant is an Organization check here. ☐				
Prefix	Given Name	Middle Name	Family Name	Suffix
Mailing Address Information For Applicant:				
Address 1				
Address 2				
City		State/Province		
Country		Postal Code		
Phone Number		Fax Number		
Email Address				
Additional Applicant Data may be generated within this form by selecting the Add button. Add				

Assignee Information including Non-Applicant Assignee Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	58557
		Application Number	
Title of Invention	AGGREGATE TRANSFERRING SYSTEM		

Assignee 1				
Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication. An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication.				
Remove				
If the Assignee or Non-Applicant Assignee is an Organization check here. ☐				
Prefix	Given Name	Middle Name	Family Name	Suffix
Mailing Address Information For Assignee including Non-Applicant Assignee:				
Address 1				
Address 2				
City		State/Province		
Country i		Postal Code		
Phone Number		Fax Number		
Email Address				
Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button. Add				

Signature:

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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).**

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	58557
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Title of Invention	AGGREGATE TRANSFERRING SYSTEM		

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AGGREGATE TRANSFERRING SYSTEM

REFERENCE TO RELATED APPLICATIONS

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This application claims the benefit of the priority of U.S. Provisional Patent Application No. 63/223,124, filed July 19, 2021, which is hereby incorporated by reference in its entirety.

10 BACKGROUND

Field

15 The present disclosure relates to material handling apparatus and more particularly pertains to a new aggregate transferring system for receiving aggregate from a vehicle and elevating the aggregate to a higher vertical level for deposit into, for example, a silo.

20 SUMMARY

The present disclosure relates to an aggregate transferring apparatus for elevating and transferring aggregate. The apparatus may comprise a base assembly for receiving aggregate to be
25 conveyed by the transferring apparatus. The base assembly may include a base frame being elongated along a longitudinal axis and having a leading end and a trailing end, an unloader structure mounted on the base frame to receive aggregate from a vehicle at least partially positioned over the base frame, and a base conveyor
30 mounted on the base frame and extending along a longitudinal

portion of the base frame between the leading and trailing ends of the base frame. A portion of the base conveyor may be positioned adjacent to the unloader structure to receive aggregate from the vehicle positioned over the base frame. The aggregate transferring apparatus may further comprise an aggregate elevating assembly for elevating aggregate from the base assembly. The aggregate elevating assembly may include a deployable frame mounted on the base frame and being movable between a storage position and a deploy position, with the storage position corresponding to a transport configuration of the apparatus and the deploy position corresponding to an operational configuration of the apparatus. Further, the deployable frame may be elongated with a base end and a free end. The aggregate elevating assembly may further include an elevating conveyor configured to receive aggregate from the base conveyor and convey the aggregate upwardly from the base assembly toward the free end of the deployable frame. The aggregate transferring apparatus may also comprise a conveyor extension assembly for conveying aggregate to locations horizontally outward from the aggregate elevating assembly. The conveyor extension assembly may include an extension conveyor for moving aggregate from an inlet of the extension conveyor to an outlet of the extension conveyor at a location outward from the aggregate elevating assembly. The extension conveyor may be movable with respect to the aggregate elevating assembly between a lowered position corresponding to the transport configuration of the apparatus and a raised position corresponding to the operational configuration of the apparatus. The lowered position may be characterized by the extension conveyor being positioned adjacent to the deployable frame of the aggregate elevating assembly, and the raised position may be characterized by the extension conveyor being positioned generally away from the deployable frame of the aggregate elevating

assembly. The extension conveyor may be articulated between the inlet and outlet with an inboard segment and an outboard segment. The inboard segment may be pivotally connected to the deployable frame of the aggregate elevating assembly by an inboard pivot, and
5 the outboard segment may be pivotally connected to the inboard segment by an outboard pivot.

There has thus been outlined, rather broadly, some of the more important elements of the disclosure in order that the detailed
10 description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are additional elements of the disclosure that will be described hereinafter and which will form the subject matter of the claims appended hereto.

15 In this respect, before explaining at least one embodiment or implementation in greater detail, it is to be understood that the scope of the disclosure is not limited in its application to the details of construction and to the arrangements of the components, and the
20 particulars of the steps, set forth in the following description or illustrated in the drawings. The disclosure is capable of other embodiments and implementations and is thus capable of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein
25 are for the purpose of description and should not be regarded as limiting.

As such, those skilled in the art will appreciate that the conception, upon which this disclosure is based, may readily be
30 utilized as a basis for the designing of other structures, methods and systems for carrying out the several purposes of the present disclosure. It is important, therefore, that the claims be regarded as

including such equivalent constructions insofar as they do not depart from the spirit and scope of the present disclosure.

5 The advantages of the various embodiments of the present disclosure, along with the various features of novelty that characterize the disclosure, are disclosed in the following descriptive matter and accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

10 The disclosure will be better understood and when consideration is given to the drawings and the detailed description which follows. Such description makes reference to the annexed drawings wherein:

15 Figure 1A is a schematic perspective view of a new aggregate transferring system according to the present disclosure shown with respect to silos depicted in broken lines.

20 Figure 1B is a schematic top view of a new aggregate transferring system according to the present disclosure shown with respect to silos depicted in broken lines.

25 Figure 2A is a schematic side view of the aggregate transfer apparatus shown in a transport or travel configuration and attached to a towing vehicle, according to an illustrative embodiment.

30 Figure 2B is a schematic top view of the aggregate transfer apparatus in the travel configuration, according to an illustrative embodiment.

Figure 3 is a schematic side view of a forward portion of the aggregate transfer apparatus in the travel configuration, according to an illustrative embodiment.

5 Figure 4 is a schematic rear end view of the aggregate transfer apparatus in an operational configuration, according to an illustrative embodiment.

10 Figure 5A is a schematic side view of the aggregate transfer apparatus raised out of the transport configuration into a first position, according to an illustrative embodiment.

15 Figure 5B is a schematic side view of the aggregate transfer apparatus raised out of the transport configuration into a second position, according to an illustrative embodiment.

20 Figure 5C is a schematic side view of the aggregate transfer apparatus raised out of the transport configuration in a fourth position, according to an illustrative embodiment.

25 Figure 5D is a schematic side view of the aggregate transfer apparatus in an operational configuration, according to an illustrative embodiment.

30 Figure 6 is a schematic perspective view of a forward portion of the aggregate transfer apparatus in the operational configuration including the unloader structure of the base assembly shown in an operational condition, according to an illustrative embodiment.

 Figure 7A is a schematic perspective view of a rearward portion of the aggregate transfer apparatus in the operational configuration including the aggregate elevating assembly, according to an illustrative embodiment.

Figure 7B is a schematic second perspective view of the rearward portion of the aggregate transfer apparatus shown in Figure 7A, according to an illustrative embodiment.

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Figure 8A is a schematic side view of an upper portion of the aggregate transfer apparatus in the operational configuration with the extension conveyor shown in the raised position, according to an illustrative embodiment.

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Figure 8B is a schematic perspective view of the upper portion of the aggregate transfer apparatus in the operational configuration with the extension conveyor shown in the raised position, according to an illustrative embodiment.

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Figure 8C is a schematic second perspective view of the upper portion of the aggregate transfer apparatus in the operational configuration with the extension conveyor shown in the raised position, according to an illustrative embodiment.

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Figure 8D is a schematic perspective view of the inboard segment of the extension conveyor of the aggregate transfer apparatus, according to an illustrative embodiment.

25

Figure 8E is a schematic perspective view of the outboard segment of the extension conveyor of the aggregate transfer apparatus, according to an illustrative embodiment.

Figure 8F is a schematic perspective view of the chute of the extension conveyor of the aggregate transfer apparatus, according to an illustrative embodiment.

30

Figure 9 is a schematic block diagram of elements of control-related elements of the aggregate transfer apparatus, according to an illustrative embodiment.

5 DETAILED DESCRIPTION

With reference now to the drawings, and in particular to Figures 1 through 9 thereof, a new aggregate transferring system embodying the principles and concepts of the disclosed subject
10 matter will be described.

The applicants have recognized that an apparatus for transferring aggregate, such as from a vehicle to a storage silo, would be particularly advantageous if the apparatus had the
15 capability to deploy itself at the location of transfer without the need for any significant assistance from other apparatus, such as cranes or telescopic handlers (e.g., “tele-handlers”). The ability of the apparatus to “self deploy” can minimize the complexity of the deployment operation by eliminating any need to provide the
20 additional apparatus at a work site, likely reducing the number of personnel involved in the deployment operation, as well as eliminating the need to coordinate the movements of the additional apparatus with respect to the aggregate transferring apparatus (as well as the dangers inherent with such coordination). Moreover, the
25 applicants have also recognized the advantages provided by an aggregate transfer apparatus which is highly integrated such that all of the major components of the apparatus are able to be transported as a unit between locations without elements being hauled by separate transport.

30

In one aspect, the disclosure relates to an aggregate transferring apparatus 10 for transferring aggregate, as will be

illustratively described. The apparatus 10 is suitable for performing the transfer of aggregate from one location to another, such as, for example, from a vehicle carrying the aggregate to a silo 1 for storing the aggregate. Illustratively, the aggregate transferring apparatus 10 may be utilized for transferring an aggregate such as sand, and in some implementations the sand may be of the type utilized in the process of hydraulic fracturing in connection with subterranean petroleum drilling. The vehicle may comprise a truck suitable for carrying the aggregate, and dumping or otherwise dispensing the aggregate, such as a bottom dump trailer. The silo may be positioned on the ground surface and may be vertically elongated with a top elevated above the ground surface, and the top have a port 2 which may be open, or openable (and closable), to receive the aggregate into the interior of the silo. In some applications, more than one silo may be grouped together adjacent to each other, such as in a two silo wide by three silo length array.

The aggregate transferring apparatus 10 may have an operational configuration (see, e.g., FIGS. 1A, 1B, 4, 5D, 7A, 7D, and 8A through 8F) in which the apparatus is configured to receive the aggregate, and then transport or convey the aggregate to a position elevated above the ground surface so that the aggregate may be dispensed into a silo, such as through the open top of the silo. The aggregate transferring apparatus 10 may also have a transport or travel configuration (see, e.g., FIGS. 2A, 2B and 3) in which the apparatus is suitable to be moved from one location to another, such as by towing the apparatus over roads and highways. In general, in the operational configuration, the apparatus may be relatively extended and expanded, while in the transport

configuration the apparatus may be relatively collapsed and compact to facilitate movements on roads.

5 In greater detail, the aggregate transferring apparatus 10 may include a base assembly 12 for receiving aggregate to be conveyed by the transferring apparatus and forming the portion of the apparatus 10 generally extending along and engaging the ground surface, particularly in the operational configuration. The base assembly 12 may comprise a base frame 14 which may be elongated
10 along a longitudinal axis 16 of the frame 14 and the assembly 12. The base frame 14 has a leading end 18 and a trailing end 19, with the leading end being generally oriented toward the normal direction of movement of the apparatus 10 when the apparatus is being moved in the transport configuration. The frame 14 may have
15 a leading portion 20 which includes the leading end 18 as well as the portion of the base frame adjacent to the leading end, a trailing portion 22 which includes the trailing end 19 as well as the portion of the base frame adjacent to the trailing end. The base frame 14 may also include a medial portion 24 which is positioned between
20 the leading 20 and trailing 22 portions.

The base assembly 12 may also include at least one axle 26 which is mounted on the base frame 14, and a pair of wheels 28 which are mounted on opposite ends of the axle 26. Typically, to
25 enhance the move ability of the apparatus 10 over highways, the base assembly will include a plurality of axles positioned along the base frame in the longitudinal direction of the base frame. Illustratively, the plurality of axles 26 and corresponding wheels 28 are located on the medial portion 24 of the base frame. In some
30 embodiments, the axles are mounted on the base frame 14 utilizing

one or more tandem walking beams, although other suspension structures may be utilized.

5 In some embodiments, the base assembly 12 may include an outrigger structure 30 mounted on the base frame 14 for enhancing the stability of the operational configuration of the apparatus 10, as well as the stability as the apparatus moves between the operational and transport configurations. The outrigger structure 30 may be positioned on the base frame 14 toward the trailing end 19, such as
10 on the trailing portion 22 of the frame 14. The outrigger structure 30 may be movable with respect to the base frame 14, and may be movable between a stabilizing condition (see, e.g., FIGS. 1A, 1B and 4) and a non-stabilizing condition (see, e.g., FIGS. 2A, 2B and 3). In general, the non-stabilizing condition of the outrigger
15 structure 30 may correspond to the transport configuration of the apparatus 10 while the stabilizing condition of the structure 30 may correspond to the operational configuration of the apparatus. The stabilizing condition of the outrigger structure 30 may also be utilized when the apparatus 10 is moving from the transport
20 condition to the operational condition, and also when the apparatus 10 is moving from the operational condition to the transport condition.

In some greater detail, the outrigger structure 30 may include
25 at least one outrigger arm 32 which is mounted on the base frame 14, and the outrigger arm may be pivotable with respect to the base frame. The outrigger arm 32 may be oriented substantially perpendicular to the longitudinal axis 16 of the base frame in the stabilizing condition of the outrigger structure, and may be oriented
30 substantially parallel to the longitudinal axis in the non-stabilizing condition of the outrigger structure. In some of the most preferable

embodiments, a pair of the outrigger arms 32, 34 is utilized and each arm is pivotally mounted on the base frame. The pair of outrigger arms 32, 34 may extend in substantially opposite directions from each other in the stabilizing condition and the arms
5 may extend substantially parallel to each other in the non-stabilizing condition. Further, the pair of outrigger arms 32, 34 may be positioned astride of the wheels 28 on the axles when the outrigger structure is in the non-stabilizing condition.

10 The outrigger structure 30 may further include at least one outrigger leg 33 that is configured to extend downwardly from one of the outrigger arms 32, 34 to contact the ground surface below the outrigger arm. The outrigger leg 33 may have an extended position in which the leg 33 is extended away from the outrigger arm toward
15 the ground surface to contact the ground surface for providing stability to the apparatus 10. The outrigger leg 33 may also have a retracted position in which the leg 33 is retracted toward the outrigger arm and away from the ground surface. A pair of the outrigger legs 33 may be provided, with each outrigger leg being
20 mounted on one of the outrigger arms 32, 34. The extended position of the outrigger legs 33 may correspond to the deployed mode of the apparatus 10 and the retracted position of the outrigger leg may correspond to the storage mode of the apparatus. An outrigger leg actuator 35 may be provided for each outrigger leg 33 to move the
25 outrigger leg between the extended position and the retracted position, and the actuator 35 may be connected to the outrigger arm and the outrigger leg to act between the arm and leg.

30 Additionally, at least one stabilizing leg 36 may be provided that is extendable downwardly from the base frame 14 to contact the ground surface below the apparatus 10. The stabilizing leg 36 may

have an extended position in which the leg 36 is extended away from the base frame 14 toward the ground surface to contact with the ground surface and a retracted position in which the leg 36 is retracted toward the base frame and away from the ground surface.

5 A plurality of the stabilizing legs 36 may be utilized, and may include a pair of the stabilizing legs each being mounted on the base frame 14. The pair of stabilizing legs 36 may be located toward the trailing end 19 of the base frame, and may be laterally offset from a central longitudinal axis of the base frame, such as or locations
10 between the outrigger legs 33 mounted on the outrigger arms 32, 34 (see, e.g., FIG. 4). The extended position of the stabilizing legs 36 may correspond to the deployed mode of the apparatus and the retracted position of the stabilizing legs may correspond to the storage mode of the apparatus, A stabilizing leg actuator 37 being
15 configured to move the at least one stabilizing leg between the extended position in the retracted position, the stabilizing leg actuator acting between the base frame and the stabilizing leg,

The base assembly 12 may further comprise an unloader
20 structure 40 for receiving the aggregate from the vehicle carrying the aggregate to the apparatus 10. The unloader structure 40 may be mounted on the base frame 14, and may be positioned toward the leading end 18 of the frame 14 and on the leading portion 20 of the frame (but also may be spaced from the leading end of the frame).
25 The unloader structure 40 may have a transport condition and an operational condition, with the transport condition generally corresponding to the transport configuration of the apparatus 10 and the operational condition generally corresponding to the operational configuration of the apparatus. The unloader structure 40 may
30 include a pair of ramps 42, 44 mounted on the base frame 14, with each of the ramps being pivotable with respect to the base frame. In

the operational condition, the ramps 42, 44 may extend laterally from the base frame 14 in substantially opposite directions in the operational condition, and may be oriented substantially horizontally for contacting the ground surface. In the transport condition, the ramps may be oriented substantially parallel with respect to each other, and may extend substantially vertically upwardly from the base frame 14. Illustratively, each of the ramps 42, 44 may comprise a pair of ramp portions 46, 47 positioned adjacent to each other, although a ramp comprised of a single ramp portion may also be utilized. Each of the ramps 42, 44, and ramp portions 46, 47 if utilized, may have a position corresponding to the transport condition of the unloader structure 40 and also have a position corresponding to the operational condition of the unloader structure. At least one ramp actuator 45 may be provided which is configured to move at least one of the ramps between the position corresponding to the transport condition and the position corresponding to the operational condition. Typically, a plurality of the ramp actuators 45 may act on the ramps 42, 44 (and ramp portions 46, 47 if utilized) to move the ramps, and/or the portions of the ramps, between the positions corresponding to the transport and operational conditions of the unloader structure.

The unloader structure 40 may further include a grate 48 mounted on the base frame 14 that may be substantially horizontally oriented and positioned between the pair of ramps 42, 44, and at least a portion of the grate may be reticulated with holes to permit aggregate landing on the grate to pass through the grate.

Further included in the base assembly 12 may be a base conveyor 50 mounted on the base frame 14 and which extends along a longitudinal portion of the base frame between the leading 18 and

trailing ends of the base frame. The base conveyor 50 may tend to move aggregate falling onto the conveyor toward the trailing end 19 of the frame 14. The base conveyor 50 may have a receiving end 52 and a dispensing end 54, with the receiving end being located
5 toward the leading end 18 and the dispensing end being located toward the trailing end 19 of the base frame. The base conveyor 50 may comprise a base conveyor belt 56 for carrying aggregate away from the unloader structure 40, and at least a portion of the belt 56 may be positioned below the grate 48 such that gravity moves the
10 aggregate through the grate and onto an upper stretch or portion of the belt supporting aggregate being carried by the belt. The base conveyor 50 may have a plurality of support rollers 58 which are mounted on the base frame 14 and extend laterally with respect to the longitudinal axis 16 of the base frame to support the upper
15 stretch of the base conveyor belt.

The aggregate transferring apparatus 10 may further include an aggregate elevating assembly 60 for elevating aggregate received from the base assembly to a relatively higher vertical level or
20 elevation above the ground surface. The aggregate elevating assembly 60 may include a deployable frame 62 which is movably mounted on the base assembly 12. The deployable frame 62 may be mounted on the base frame 14, and may be located toward the trailing end 19. The deployable frame 62 may be elongated with a
25 base end 64 and a free end 66, with the base end being mounted on the base assembly 12. The deployable frame 62 may be movable between a storage position generally corresponding to the transport configuration of the apparatus 10, and a deploy position generally corresponding to the operational configuration of the apparatus.
30 The storage position of the deployable frame 62 may be characterized by the frame 62 being substantially horizontally

oriented and generally parallel to the base frame 14 and the ground surface. The deploy position of the deployable frame 14 may be characterized by the frame 14 being oriented substantially vertical, and oriented substantially perpendicular to the base frame 16 and
5 the ground surface. In illustrative embodiments, the deployable frame 62 comprises a truss frame with a space frame about a substantially hollow interior.

The aggregate elevating assembly 60 may also include trailer
10 structure 70 which is configured to provide trailer functionality to the elevating assembly, and by extension the aggregate transferring apparatus 10, when the apparatus 10 is in the transport configuration such that the apparatus 10 may be towed across the ground surface. The trailer structure 70 may be positioned adjacent
15 to, and typically in contact with, the ground surface when the deployable frame is in the storage position (and other elements of the apparatus 10 are in the transport configuration). In greater detail, the trailer structure 70 may include at least one landing leg 72 mounted on the deployable frame 62 to rest upon the ground
20 surface when the deployable frame is in the storage position, and the leg may extend outwardly from the frame 62. Typically, a pair of the landing legs 72, 74 may be utilized with each of the legs having similar orientation with respect to the frame 62. The trailer structure 70 may further include a kingpin 76 mounted on the
25 deployable frame 62 which is able to engage the fifth wheel hitch structure of a vehicle, such as a semi-tractor, for towing the apparatus 10 in the transport configuration. The kingpin 76 may be located toward the free end 66 of the deployable frame 62, and may be directed in the same direction as the landing leg or legs such that
30 the kingpin and the landing legs are directed downwardly toward the ground surface when the apparatus 10 is in the transport

configuration. In some embodiments, the free end 66 of the deployable frame 62 may extend beyond the leading end 18 of the base frame 14 when the deployable frame is in the storage position so that the trailer structure is able to move past the base assembly 12 and engage the ground surface.

The aggregate elevating assembly 60 may further include an elevating conveyor 80 for conveying aggregate upwardly from the base assembly 12. The elevating conveyor 80 may extend longitudinally with respect to the deployable frame 62, and may extend from the base end 64 to the free end 66 of the frame 62. The elevating conveyor 60 may be configured to receive aggregate from the base conveyor, and may have an intake 82 and an output 84. The intake 82 may be being located toward the base end 64 of the deployable frame 62 and also may be located adjacent to the dispensing and 54 of the base conveyor 50 to receive aggregate from the conveyor 50. The output 84 may be located toward the free end 66 of the deployable frame, and may be configured to output the conveyed aggregate on the side of the frame 62 that is opposite of the side of the frame 62 at which the intake is located. In some embodiments, the elevating conveyor 80 may comprise a bucket conveyor, and the conveyor 80 may be at least partially within the truss frame of the deployable frame 62. Illustratively, the elevating conveyor 8 may have a length of support o 70 feet or more.

The aggregate transferring apparatus 10 may also include a frame deployment assembly 90 which is configured to move the deployable frame 62 of the elevating assembly 60 with respect to the base frame 14 of the base assembly 12. The frame deployment assembly 90 may be configured to move the deployable frame between the storage and deploy positions for converting the

apparatus 10 between the transport and operational configurations. The frame deployment assembly 90 may be mounted on the base frame 14 and the deployable frame 62.

5 In illustrative embodiments, the frame deployment structure 90 may comprise at least one lift arm structure 92 mounted on the base frame 16 and the deployable frame 62 which may form a linkage between the base frame and the deployable frame. Illustratively, the frame deployment assembly 90 may include a pair
10 of the lift arm structures 92, 94 mounted on the base 14 and deployable 62 frames. In general, the pair of lift arm structures 92, 94 may be laterally spaced with respect to the longitudinal axis 16 of the base frame, and may be located on opposite lateral sides of the deployable frame 62. Each of the lift arm structures 92, 94 may
15 have a first end 96 which is mounted on a base mount point 98 on the base frame 14 which may permit pivotal movement of the first end 96 with respect to the base mount point 98. Further, each of the lift arm structures 92, 94 may have a second end 100 mounted on an upper mount point 102 on the deployable frame 62. The upper
20 mount point 102 may include a cross-member 104 that extends between the pair of lift arm structures 92, 94 and that is mounted on the deployable frame.

 In some embodiments, each of the lift arm structures 92, 94
25 may be articulated between the first 96 and second 100 ends such that the structures 92, 94 articulate as the deployable frame 62 moves between the storage and deploy positions and the apparatus 10 moves between the transport and operational configurations. Each of the lift arm structures 92, 94 may include a first link
30 member 106 and a second link member 108 which are pivotally mounted together. The first link member 106 may have the first end

96 of the respective lift arm structure, and the first link member may be pivotally mounted on the base mount point 98 to pivot with respect to the base frame 14. The first link member 106 may be elongated in shape and have a first intermediate end 110 located on
5 the member 106 opposite of the first end 96 of the lift arm structure. Illustratively, the first link member 106 may be formed by a bar. The second link member 108 may have the second end 100 of the respective lift arm structure, and the second link member may be pivotally mounted on the upper mount point 102 to pivot with
10 respect to the deployable frame 62. The second link member 108 may be elongated in shape and have a second intermediate end 112 located on the member 108 opposite of the second end 100 of the lift arm structure. The second intermediate end 112 of the second link member may be pivotally mounted to the first intermediate end
15 110 of the first link member. The second link member may form a medial mount point 114. Illustratively, the second link member 108 may comprise a bar and a weldment.

The frame deployment structure 90 may further include lift
20 actuator 116 which acts on at least one of the lift arm structures 92, 94. The lift actuator 116 may be mounted on the base frame 14 and the respective lift arm structure, and may be mounted on the base mount point 98 on the base frame and the medial mount point 114 on the second link member 108 of the respective lift arm structure.
25 The lift actuator 116 may be extendable and retractable in length to move the second link member 108 with respect to the base frame. Illustratively, the lift actuator may comprise a hydraulic actuator, although other types of actuators may also be employed.

30 The aggregate transferring apparatus 10 may further include a conveyor extension assembly 120 for conveying aggregate to

locations horizontally outward from the aggregate elevating assembly 60, such as, for example, one or more silos to which the apparatus 10 is positioned adjacent. The conveyor extension assembly 120 may include an extension conveyor 122 for moving aggregate from the aggregate elevating assembly 60 to a location outward from the assembly 60. The extension conveyor 122 may be movable with respect to the elevating assembly 60, and may be extendable outwardly from the assembly 60 in a substantially horizontal orientation. The extension conveyor 122 may be movable between a lowered position (see. e.g., FIG. 2A) and a raised position (see. e.g., FIG. 5D). FIGS. 5A through 5C illustrate three illustrative intermediate positions of the extension conveyor 122 between the lowered position of FIG. 2A and the raised position of FIG. 5D. The lowered position of the extension conveyor 122 may correspond to the transport configuration of the apparatus 10, and the raised position of the conveyor 122 may correspond to an operational configuration of the apparatus. The lowered position may be further characterized by the extension conveyor 122 being positioned adjacent to the deployable frame 62 of the aggregate elevating assembly 60, and the extension conveyor may be oriented substantially parallel to the deployable frame 62 in the lowered position. The raised position of the conveyor 122 may also be characterized by the extension conveyor being positioned generally away from the deployable frame 62, and the extension conveyor may be cantilevered outwardly from the deployable frame in the raised position. The raised position of the extension conveyor 122 may further be characterized by the conveyor 122 being oriented substantially perpendicular to the deployable frame 62 of the aggregate elevating assembly. As illustrated in FIGS. 5A through 5D, the extension conveyor 122 may be maintained in a substantially horizontal orientation (e.g., substantially parallel to

the base frame 14) as the deployable frame 62 of the elevating assembly 60 is raised from the storage position to the deploy position, and similarly the conveyor 122 may be maintained and the substantially horizontal orientation as the frame 62 is lowered from
5 the deploy position to the storage position.

The extension conveyor 122 may have an inlet 124 for receiving aggregate from the aggregate elevating assembly 60 and an outlet 126 for dispensing aggregate from the extension conveyor
10 to a desired location, such as into the port 2 at the top of a silo.

The conveyor extension assembly 120 may comprise an inboard segment 130 and an outboard segment 132, with the inboard and outboard segments being articulated with respect to each other
15 to permit adjustment of the position of the outlet 126 with respect to the inlet 124 including the effective distance between the outlet 126 and the inlet 124. The inboard segment 130 may be pivotally connected to the deployable frame 62 of the aggregate elevating assembly by an inboard pivot 134, which may permit pivoting of the
20 inboard segment 130 with respect to the deployable frame about a substantially vertical axis. The outboard segment 132 may be pivotally connected to the inboard segment 130 by an outboard pivot 136, which may permit pivoting of the outboard segment 132 with respect to the inboard segment 130 about a substantially vertical
25 axis. The inboard segment 130 has a first inboard segment end 138 mounted on the deployable frame 62, and may be configured to receive aggregate from the output 84 of the elevating conveyor 80. The inboard segment 130 may also have a second inboard segment end 140 which is located opposite of the first inboard segment end
30 138 on the segment 130, and may also be located at the outboard pivot 136. The outboard segment 132 has a first outboard segment

end 142 which is located at the outboard pivot 136 and which may be pivotally mounted on the second inboard segment end 140 of the inboard segment 130. The outboard segment 132 has a second outboard segment end 144 which is located opposite of the first outboard segment end 142, and the outlet 126 of the extension conveyor may be located at the second outboard segment end.

Movement of the inboard segment with respect to the deployable frame at the inboard pivot, and the outboard segment with respect to the inboard segment at the outboard pivot, may be accomplished using any suitable mechanism. In some embodiments, an inboard pivot actuator 135 may be configured to pivot the inboard segment 130 with respect to the deployable frame 62, and the inboard pivot actuator may act between the deployable frame and the truss frame of the inboard segment. Additionally, an outboard pivot actuator 137 may be configured to pivot the outboard segment 132 with respect to the inboard segment 130, and the outboard pivot actuator may act between the inboard and outboard segments. Illustratively, the inboard pivot actuator 135 and the outboard pivot actuator 137 may comprise, such as, for example, a slew drive mechanism which may be highly suitable for permitting transfer of aggregate from the elevating conveyor 80 to inboard segment 130 of the extension conveyor 122, and from the inboard segment to the outboard segment 132 of the extension conveyor.

Each of the inboard 130 and outboard 132 segments may have substantially similar constructions. Illustratively, each segment may include a truss frame 146 and a plurality of support rollers 148 rotatably mounted on the truss frame 146. Each segment may further include a conveyor belt 150 which may be an endless belt supported on the support rollers 148, and an upper wall 152 may be mounted on the truss frame in a position above the conveyor belt to

at least partially cover an upper stretch of the conveyor belt as well is aggregate carried by the upper stretch.

5 In some embodiments, when in the transport configuration of the apparatus 10, the inboard segment 130 of the extension conveyor 122 may be positioned over a portion of the deployable frame 62 of the aggregate elevating assembly, and the outboard segment 132 of the extension conveyor may be positioned laterally alongside a portion of the deployable frame 62.

10 The conveyor extension assembly 120 may also comprise a conveyor support frame 154 for supporting the segments 130, 132 of the extension conveyor on the aggregate elevating assembly 60. The conveyor support frame 154 may be movable with respect to the
15 deployable frame 62 of the elevating assembly when the extension conveyor 122 moves between the lowered and raised positions, and the conveyor support frame may be pivotally mounted on the deployable frame to permit pivoting of the support frame 154 with respect to the deployable frame about a substantially horizontal
20 axis. The inboard segment 130 may be pivotally mounted on the support frame by the inboard pivot 134. Illustratively, the conveyor support frame 154 may include a pair of lateral sections 156, 158 which are positionable on the lateral sides of the deployable frame 62, particularly when the extension conveyor 122 is in the lowered
25 position.

A conveyor extension assembly 120 may further comprise an extension conveyor lift structure 160 for moving the extension conveyor 122 between the lowered position and the raised position.
30 The extension conveyor lift structure 160 may act on the conveyor support frame 154 and may be mounted on the conveyor support frame and the deployable frame 66. The extension conveyor lift

structure 160 may comprise at least one extension actuator 162 which may be extendable to pivot the conveyor support frame 154 away from the deployable frame 62 and move the extension conveyor 122 to the raised position. The extension actuator 162 may be retractable to pivot the conveyor support frame 154 toward the deployable frame and move the extension conveyor 122 to the lowered position. In some highly preferred embodiments, a pair of the extension actuators 162 may be provided and may be positioned along the lateral side of the deployable frame.

The conveyor extension assembly 120 may further include an inboard conveyor motor 139 which is configured to move the conveyor belt of the inboard conveyor segment 130, and may be mounted on the truss frame of the inboard conveyor segment.

Additionally, the conveyor extension assembly 120 may include an outboard conveyor motor 143 which is configured to move the conveyor belt of the outboard conveyor segment 132, and may be mounted on the truss frame of the outboard conveyor segment.

The conveyor extension assembly 120 may further include a chute 164 for receiving aggregate from the extension conveyor 122. The chute 164 may be mounted on the outboard segment 136 of the extension conveyor, and may be in communication with the outlet 126 of the conveyor 122 to receive aggregate from the conveyor.

The chute 164 may be located at the second outboard segment end 144, and may extend downwardly from the outlet. The chute 164 may terminate in a spout 166 where the conveyed aggregate exits the chute. In some embodiments, the chute 164 may be extendable to selectively increase the length of the chute to permit the spout 166 at the end of the chute to be moved closer to (and optionally into) the port 2 at the top of the silo to reduce the potential

generation of dust in the air, and then raise the spout 166 to permit the end to avoid contact with elements such as the perimeter wall of the silo while repositioning the chute to another silo or removing the chute from proximity to the silo grouping. The chute 164 may be
5 movable between an extended condition (see, e.g., FIG. 8F) and a retracted condition (see, e.g., FIG. 3), and the spout 166 may have an extended position corresponding to the extended condition of the chute and a retracted position corresponding to the retracted condition of the chute. The retracted position of the spout 166 may
10 be relatively closer to the outboard segment 132 of the extension conveyor 122 than the extended position of the spout. In embodiments, the chute 164 may be moved between the extended and retracted conditions by a chute actuator 168. Illustratively, the chute may be formed of a flexible material to permit portions of the
15 chute to more readily pass over structures such as the tops of silos.

The apparatus 10 may further include a control assembly 170 for providing control and monitoring of various elements of the apparatus 10. The control assembly 170 may include a controller
20 172 which may automatically, or at the input of the operator, control elements of the apparatus. The control assembly 170 may also include manually-operated controls. Elements of the control assembly 170, such as the controller 172, may be located on a control panel 174 which may be positioned on the base frame 14 of
25 the base assembly or any other suitable position which is accessible by an operator (such as an operator standing on the ground surface adjacent to the apparatus). Various operator controls may be provided on the control panel 174 which directly or indirectly control the operation of elements of the apparatus 10. In addition
30 to the control panel 174, a remote control device 176 may be provided to control some or all of the functions of the apparatus 10

at a location away from the control panel 174, and the remote control device may communicate with the control panel through a wired or wireless communication connection. Advantageously, the remote control device 176 may be configured to control elements or functions for which it is desirable that the operator and other personnel are located away from the control panel 174 for purposes of safety or observation.

The controller 172 may receive and process information from a plurality of sensors 178 of the apparatus 10, through one or more suitable interfaces. The plurality of sensors 184 may sense various conditions or positions of elements of the apparatus or the environment about the apparatus. The plurality of sensors may include sensors for sensing conditions of various elements, such as a plurality of image sensors 180 positioned on the apparatus for capturing video or still images from perspectives on the apparatus. Illustratively, image sensors 176 may be positioned adjacent to the chute 164, and may be directed downwardly from the second outboard segment end 140 for capturing images of the position of the spout 166 below with relation to, for example, the port 2 of a silo 1. Additionally, image sensors 176 may be positioned at other locations on the apparatus 10 where visual information would be helpful, such as, for example, the upper free end 66 of the deployable frame 62 looking downwardly on the apparatus 10 using one or more of the image sensors. Images produced by the image sensors may be displayed on a display screen or monitor. The control assembly 170 may further include sensors for sensing positions of various elements, such as a plurality of segment position sensors 182 for sensing positions of the inboard 130 and outboard 132 segments of the extension conveyor. Illustratively, each of the segment position sensors 178 may be located at one or

all of the inboard 134 and outboard 136 pivots, and each position sensor may be associated with one of the pivot actuators 135, 137 to sense and communicate the relative positions of the elements connected at the respective pivot. For example, an encoder device
5 may be associated with each slew drive mechanism of the pivot actuators.

Broadly, the control assembly 170 may also include elements of the apparatus 10 which receive commands or signals from the
10 controller 172 (or operator- manipulated manual controls) in order to operate elements of the apparatus 10, such as the power control circuitry which provides electrical power to elements of the apparatus such as the motors and valves which control the supply of hydraulic fluid to elements of the apparatus such as hydraulic
15 actuators.

The control assembly 170 may implement automatic or semi-automatic functionality in the operation of the various powered elements of the apparatus 10 to provide safety and convenience in
20 the operation of the apparatus. As an example, for elements for which the initiation or termination of operation of the elements in a sequential manner is desirable or necessary, the controller 172 may be programmed to initiate or terminate the operation in the sequence in response to a single input or command from the operator.

25 Further, memory 184 associated with the controller 172 may retain information for enabling repeated movements by or positioning of elements of the apparatus. For example, the relative positions of the inboard 134 and outboard 136 segments of the extension conveyor 122 corresponding to the loading of specific silos in the silo array
30 may be stored in memory 184 such that the controller 172 is able to recall the position and orientation information of the elements from

the memory when invoked or requested by the operator in order for the controller to operate elements of the apparatus 10 to cause the ~~outlet 126~~ chute 164 to be moved to a location suitable to dispense aggregate to the identified silo of the array from the spout 166.

5

Another aspect of the disclosure is a method of setting up an apparatus, such as an apparatus of the type of the aggregate transferring apparatus 10 of the disclosure, may include providing an apparatus which may have a base assembly including a base frame and an outrigger structure and an unloader structure, an aggregate elevating assembly including a deployable frame, a frame deployment assembly including at least one lift arm structure, a conveyor extension assembly including an extension conveyor with an inboard segment, an outboard segment, and a chute, and a control assembly. The method may include identifying an area of ground surface for deployment of the apparatus, and that may include determining that the area of ground surface is substantially level and is suitably compacted for bearing the weight of the apparatus. The identification of the area of ground surface may also include determining that a space about the area of ground surface is clear of obstructions for deploying elements of the apparatus such as, for example, the outrigger structure of the base assembly and the deployable frame of the aggregate elevating assembly.

25 The method may also include positioning the apparatus 10 on the area of ground surface, which may involve towing the apparatus to the area of ground surface by a towing vehicle, such as a semi-tractor. The method may further include connecting a power source to the apparatus 10 to provide power to the control assembly 170 and the various elements of the control assembly. Such power source may be an electrical power source, and may involve the

30

connection of an electrical power cord between the controller assembly 170 and an electrical power source.

Another aspect of the method may include removing the apparatus 10 from a travel configuration, or a configuration of the apparatus suitable for transporting the apparatus on roads and highways. This aspect of the method may include retracting a lift actuator 116 acting on at least one lift arm structure 92 of the flame deployment assembly 90 to move at least a portion of the base assembly 12 upwardly in a supportive manner to at least partially remove the weight of the base assembly 12 from travel binders 3 (see, e.g., FIG. 3) utilized to secure the base assembly and aggregate elevating assembly 60 together during transport in the travel configuration. This aspect of the method may also include removing the travel binders from the base assembly 12 and elevating assembly 60 after the retraction of the lift actuator 116. Removing the apparatus from the travel configuration may further include extending at least one landing leg 72 of the trailer structure 70 of the deployable frame 62 to contact the ground surface, and may involve engaging a brake on the wheels of the towing vehicle prior to extending the landing gear and disconnecting the apparatus from the power source after extending the landing gear. Removing the apparatus from the travel configuration may also include extending the lift actuator 116 acting on the lift arm structure to permit the base assembly to contact the area of ground surface.

Another aspect of the method may include deploying the outrigger structure 30 of the base assembly to contact the area of ground surface, and may involve swinging at least one outrigger arm 32 of the outrigger structure 30 outwardly from the non-stabilizing condition to the stabilizing condition, and may further involve

extending one or more outrigger legs 33 associated with the outrigger arm or arms 32 to contact the ground surface.

Additionally, extending a stabilizer leg 36 to contact the ground surface may also be initiated. Extending of the outrigger leg 33 and
5 the stabilizer leg 36 may be performed by operating the outrigger leg actuator 35 and the stabilizing leg actuator 37 (respectively).

In still another aspect of the method, the unloader structure 40 may be moved from the transport condition to the operational
10 condition, which may involve deploying ramps of the unloader structure. In greater detail, some implementations of this aspect may include removing travel restraint links from the ramps 42, 44 of the unloader structure, and pivoting the ramps from a position corresponding to the transport condition to a position corresponding
15 to the operational condition. In embodiments in which the ramps include multiple portions, the pivoting of the ramps may include pivoting the ramp portions of each ramp to the position corresponding to the operational condition.

20 A further aspect of the method may include deploying the aggregate elevating assembly 60, which may involve rotating the deployable frame 62 upwardly into the deploy position of the frame 62, which may be performed while maintaining the inboard 130 and outboard 132 segments of the extension conveyor 122 in a
25 substantially horizontal orientation as the deployable frame rotates into the deploy position. The deployment of the elevating assembly 60 may further include engaging lock pins to secure the deployable frame 62 in the deploy position, and attaching guy wires or cables to the frame 62 and the outrigger structure 30 such that the wires
30 extend from the outrigger arms 32, 34 to on the frame 62 at locations spaced upwardly from the base end 64 of the frame 62. In

some implementations, the travel binders may be utilized to tension the guy wires.

Yet another aspect of the disclosure is a method of operating an apparatus, such as an apparatus of the type of the aggregate transferring apparatus 10 of the disclosure. The method may include positioning the chute 164 over the port 2 of a silo to which the aggregate is to be transferred, and extending the chute so that the spout 166 of the chute moves into proximity of the port 2 of the silo, such as positioning the spout of the chute in the port. The method may further include positioning an aggregate transporting vehicle on the unloader structure 40, which may involve moving a gate of the aggregate transporting vehicle into a position above the grate 48 of the unloader structure. The method may also include initiating operation of the extension conveyor 122, the elevating conveyor 80, and the base conveyor 50, and may involve first initiating operation of the extension conveyor, then second initiating operation of the elevating conveyor, and then third initiating operation of the base conveyor.

Another aspect of the method of operating the apparatus may include unloading aggregate from the aggregate transporting vehicle into the unloader structure 40, and moving the unloaded aggregate along the base conveyor 50 to the elevating conveyor 80, and along the elevating conveyor 80 to the extension conveyor 122, and along the extension conveyor 122 to the chute 164 of the extension conveyor. The method of operating the apparatus may also include periodically or occasionally relocating the chute 164 to the port 2 of another silo, and may involve emptying aggregate from the apparatus prior to the relocating movement, including emptying aggregate from the base conveyor, emptying aggregate from the elevating conveyor, and emptying aggregate from the extension conveyor. The relocation of the chute may also include retracting the chute to elevate the spout toward the retracted position, positioning the spout of the chute over a port 2 of another silo, and extending the chute to lower the spout toward the extended position adjacent to the second silo port. Further, the method may

implement initiating operation of the conveyors of the apparatus, and may involve first initiating operation of the extension conveyor, then second initiating operation of the elevating conveyor, and then third initiating operation of the base conveyor, and unloading
5 aggregate from the aggregate transporting vehicle into the unloader structure to move the aggregate from unloader structure of the base assembly to the spout of the conveyor extension assembly.

It should be appreciated that in the foregoing description and appended claims, that the terms "substantially" and
10 "approximately," when used to modify another term, mean "for the most part" or "being largely but not wholly or completely that which is specified" by the modified term.

It should also be appreciated from the foregoing description
15 that, except when mutually exclusive, the features of the various embodiments described herein may be combined with features of other embodiments as desired while remaining within the intended scope of the disclosure.

Further, those skilled in the art will appreciate that steps set
20 forth in the description and/or shown in the drawing figures may be altered in a variety of ways. For example, the order of the steps may be rearranged, substeps may be performed in parallel, shown steps may be omitted, or other steps may be included, etc.

25 In this document, the terms "a" or "an" are used, as is common in patent documents, to include one or more than one, independent of any other instances or usages of "at least one" or "one or more." In this document, the term "or" is used to refer to a nonexclusive or,
30 such that "A or B" includes "A but not B," "B but not A," and "A and B," unless otherwise indicated.

With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of the

disclosed embodiments and implementations, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art in light of the foregoing disclosure, and all
5 equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the present disclosure.

Therefore, the foregoing is considered as illustrative only of
10 the principles of the disclosure. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the disclosed subject matter to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be
15 resorted to that fall within the scope of the claims.

CLAIMS

We claim:

1. An aggregate transferring apparatus for elevating and transferring aggregate, the apparatus comprising:
 - a base assembly for receiving aggregate to be conveyed by the transferring apparatus, the base assembly comprising:
 - a base frame being elongated along a longitudinal axis and having a leading end and a trailing end;
 - an unloader structure mounted on the base frame to receive aggregate from a vehicle at least partially positioned over the base frame; and
 - a base conveyor mounted on the base frame and extending along a longitudinal portion of the base frame between the leading and trailing ends of the base frame, a portion of the base conveyor being positioned adjacent to the unloader structure to receive aggregate from the vehicle positioned over the base frame;
 - an aggregate elevating assembly for elevating aggregate from the base assembly, the aggregate elevating assembly comprising:
 - a deployable frame mounted on the base frame and being movable between a storage position and a deploy position, the storage position corresponding to a transport configuration of the apparatus and the deploy position corresponding to an operational configuration of the apparatus, the deployable frame being elongated with a base end and a free end; and
 - an elevating conveyor configured to receive aggregate from the base conveyor and convey the aggregate upwardly

from the base assembly toward the free end of the deployable frame; and

a conveyor extension assembly for conveying aggregate to locations horizontally outward from the aggregate elevating assembly, the conveyor extension assembly comprising:

an extension conveyor for moving aggregate from an inlet of the extension conveyor to an outlet of the extension conveyor at a location outward from the aggregate elevating assembly, the extension conveyor being movable with respect to the aggregate elevating assembly between a lowered position corresponding to the transport configuration of the apparatus and a raised position corresponding to the operational configuration of the apparatus, the lowered position being characterized by the extension conveyor being positioned adjacent to the deployable frame of the aggregate elevating assembly, the raised position being characterized by the extension conveyor being positioned generally away from the deployable frame of the aggregate elevating assembly, and

wherein the extension conveyor is articulated between the inlet and outlet with an inboard segment and an outboard segment, the inboard segment being pivotally connected to the deployable frame of the aggregate elevating assembly by an inboard pivot, the outboard segment being pivotally connected to the inboard segment by an outboard pivot.

2. The apparatus of claim 1 wherein the base assembly has at least one axle and a pair of wheels mounted on the at least one axle such that the base assembly is transportable across the ground surface.

3. The apparatus of claim 2 wherein the aggregate elevating assembly includes trailer structure configured to permit the apparatus to be towed across a ground surface, the trailer structure being positioned adjacent to the ground surface when the deployable frame is in the storage position.

4. The apparatus of claim 3 wherein the trailer structure comprises:

at least one landing leg mounted on the deployable frame to rest upon the ground surface when the deployable frame is in the storage position; and

a kingpin mounted on the deployable frame toward the free end of the deployable frame, the kingpin being directed in a same direction as the at least one landing leg to engage a hitch of a towing vehicle when the deployable frame is in the storage position.

5. The apparatus of claim 1 wherein the aggregate elevating assembly includes a frame deployment assembly configured to move the deployable frame with respect to the base frame between the storage and deploy positions, the frame deployment structure comprising:

at least one lift arm structure mounted on the base frame and the deployable frame and forming a linkage between the base frame and the deployable frame, the at least one lift arm structure being articulated between opposite first and second ends of the arm structure; and

an actuator mounted on the base frame and the at least one lift arm structure to move the at least one lift arm structure with respect to the base frame.

6. The apparatus of claim 5 wherein the at least one lift arm structure comprising a pair of the lift arm structures mounted on the base frame and the deployable frame, the pair of lift arm structures being located on opposite lateral sides of the deployable frame.

7. The apparatus of claim 5 wherein the at least one lift arm structure comprises a first link member and a second link member pivotally mounted together; and

wherein the actuator of the frame deployment assembly is mounted on a base mount point on the base frame and a medial mount point on the second link member.

8. The apparatus of claim 1 wherein the lowered position of the extension conveyor of the conveyor extension assembly is characterized by the extension conveyor being oriented substantially parallel to the deployable frame of the aggregate elevating assembly, the raised position of the extension conveyor being characterized by the extension conveyor being oriented substantially perpendicular to the deployable frame of the aggregate elevating assembly.

9. The apparatus of claim 1 wherein the raised position of the extension conveyor of the conveyor extension assembly is characterized by the extension conveyor being cantilevered outwardly from the deployable frame of the aggregate elevating assembly.

10. The apparatus of claim 1 wherein the inboard segment of the extension conveyor of the conveyor extension assembly is pivotable at the inboard pivot about a substantially vertical axis with respect to the deployable frame at the inboard pivot when the extension conveyor is in the raised position, the outboard segment of the extension conveyor being pivotable at the outboard pivot about a substantially vertical axis with respect to the inboard segment when the extension conveyor is in the raised position.

11. The apparatus of claim 1 wherein the outboard pivot of the extension conveyor of the conveyor extension assembly is configured to permit transfer of aggregate from the inboard segment to the outboard segment.

12. The apparatus of claim 1 wherein the conveyor extension assembly additionally comprises:

- a conveyor support frame supporting the segments of the extension conveyor on the aggregate elevating assembly, the conveyor support frame being movable with respect to the deployable frame of the aggregate elevating assembly when the extension conveyor moves between the lowered position and the raised position; and

- an extension conveyor lift structure acting on the conveyor support frame for moving the extension conveyor between the lowered position and the raised position,

13. The apparatus of claim 10 wherein the extension conveyor lift structure comprises at least one extension actuator extendable to pivot the conveyor support frame away from the deployable frame and move the extension conveyor to the raised position, the at least one extension actuator being retractable to pivot the conveyor support frame toward the deployable frame and move the extension conveyor to the lowered position.

14. The apparatus of claim 1 wherein the conveyor extension assembly includes a chute mounted on the extension conveyor to extend downward from the extension conveyor and receive aggregate from the outlet of the extension conveyor.

15. The apparatus of claim 1 wherein the base assembly includes an outrigger structure mounted on the base frame, the outrigger structure being movable with respect to the base frame between a stabilizing condition corresponding to an operational configuration of the apparatus and a non-stabilizing condition corresponding to a transport configuration of the apparatus.

16. The apparatus of claim 1 wherein the unloader structure includes a pair of ramps and a grate mounted on the base frame, the grate being positioned between the pair of ramps, at least a portion of the grate being reticulated to permit aggregate to pass through the grate and fall onto the base conveyor.

17. The apparatus of claim 16 wherein each of the ramps of the unloader structure is pivotable with respect to the base frame, the ramps extending laterally in substantially horizontal and opposite directions from the base frame in the operational condition of the apparatus, the ramps extending substantially vertical and parallel to each other in the transport condition of the apparatus.

ABSTRACT OF THE DISCLOSURE

5 An aggregate transferring apparatus for elevating aggregate
may include a base assembly with a base frame, an unloader
structure on the base frame, and a base conveyor on the base frame
positioned to receive aggregate from a vehicle positioned on the
unloader structure. The apparatus may also include an aggregate
10 elevating assembly with a deployable frame mounted on the base
frame and being movable between storage and deploy positions, and
an elevating conveyor for receiving aggregate from the base
conveyor and conveying the aggregate upwardly on the deployable
frame. The apparatus may further include a conveyor extension
15 assembly for conveying aggregate horizontally outward from the
elevating assembly. The extension assembly may include an
extension conveyor movable between lowered and raised positions
and being articulated with an inboard and outboard segments.

20

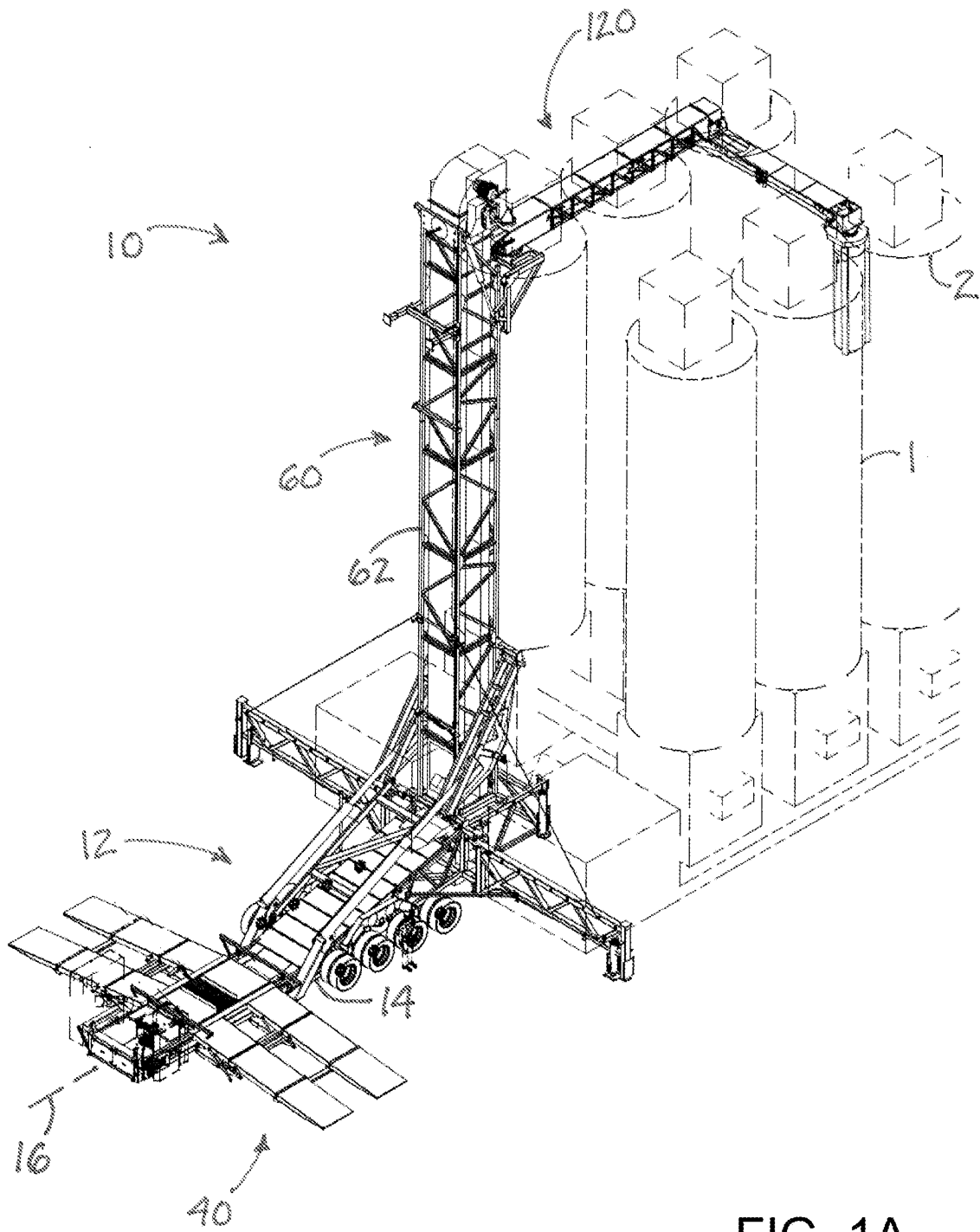


FIG. 1A

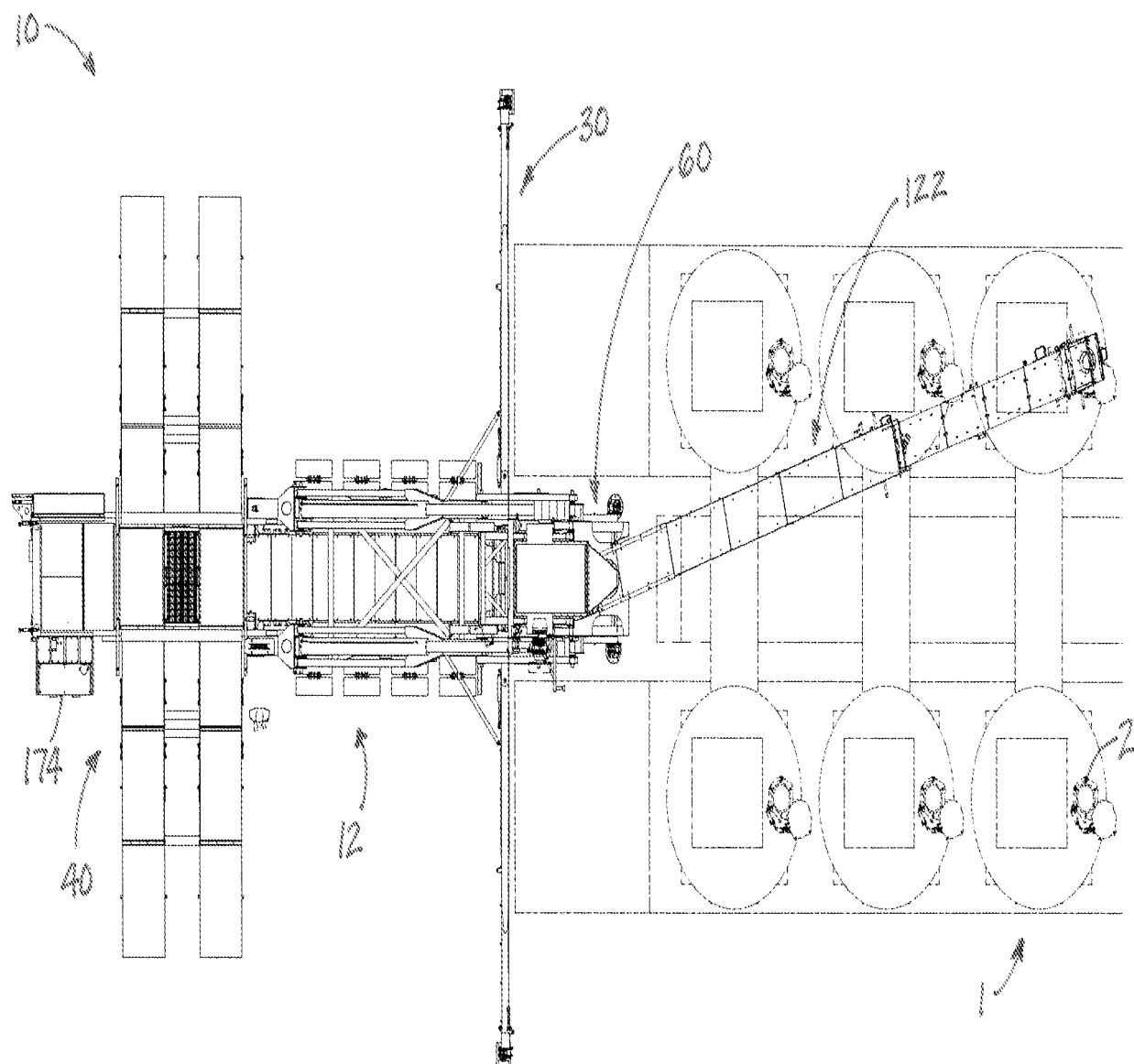


FIG. 1B

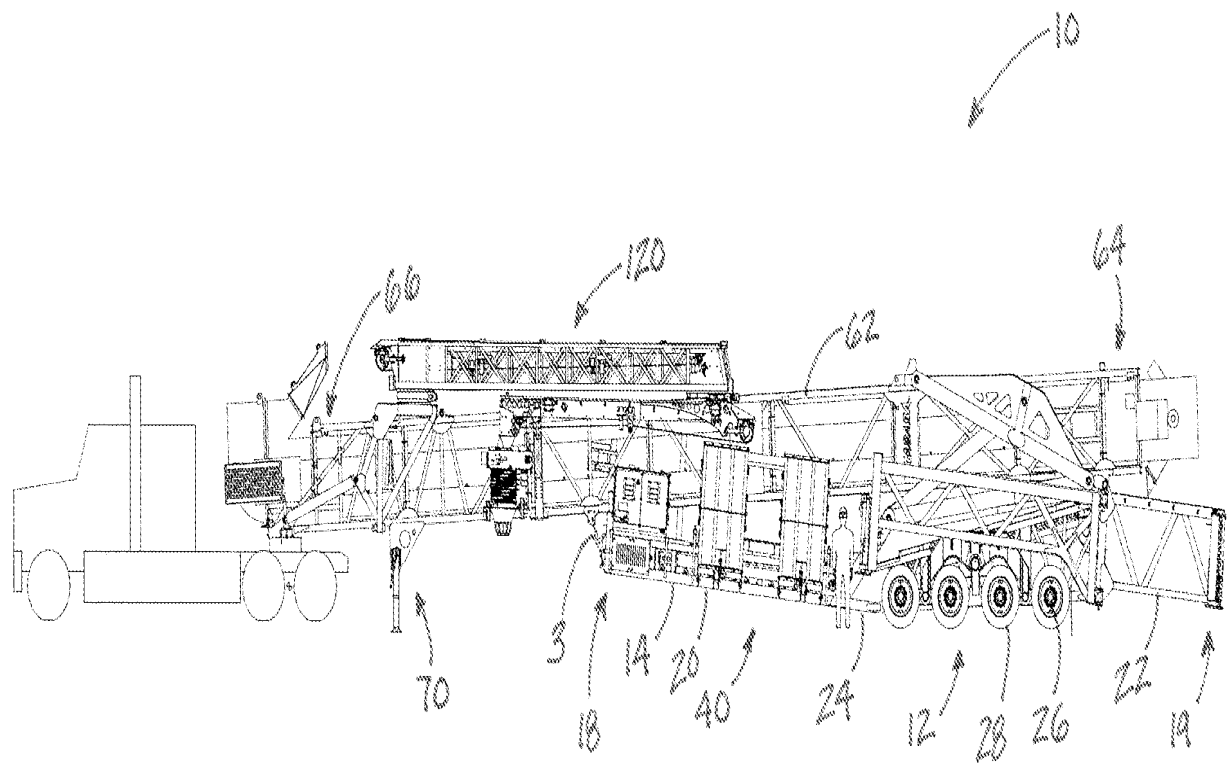


FIG. 2A

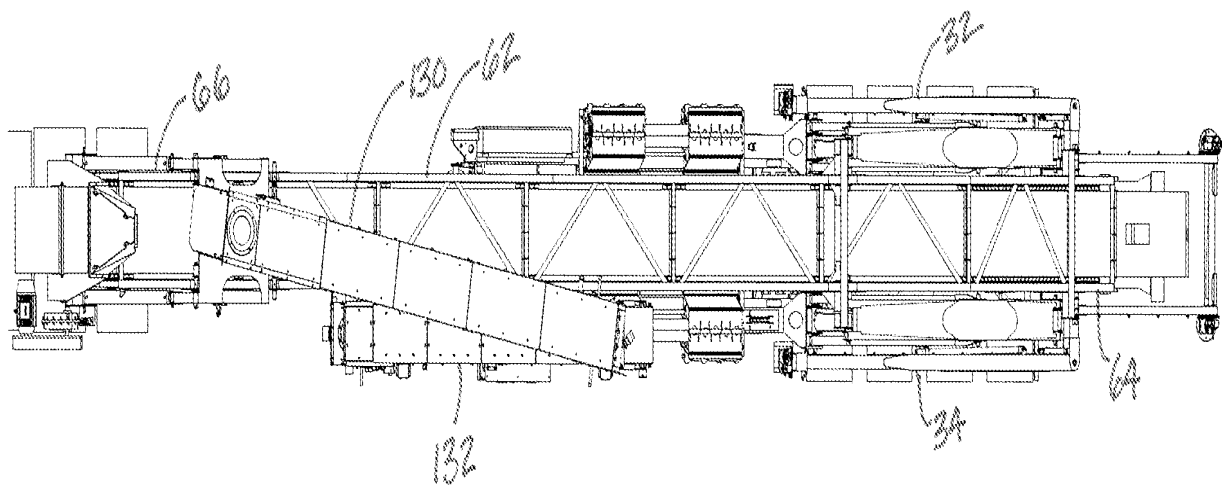


FIG. 2B

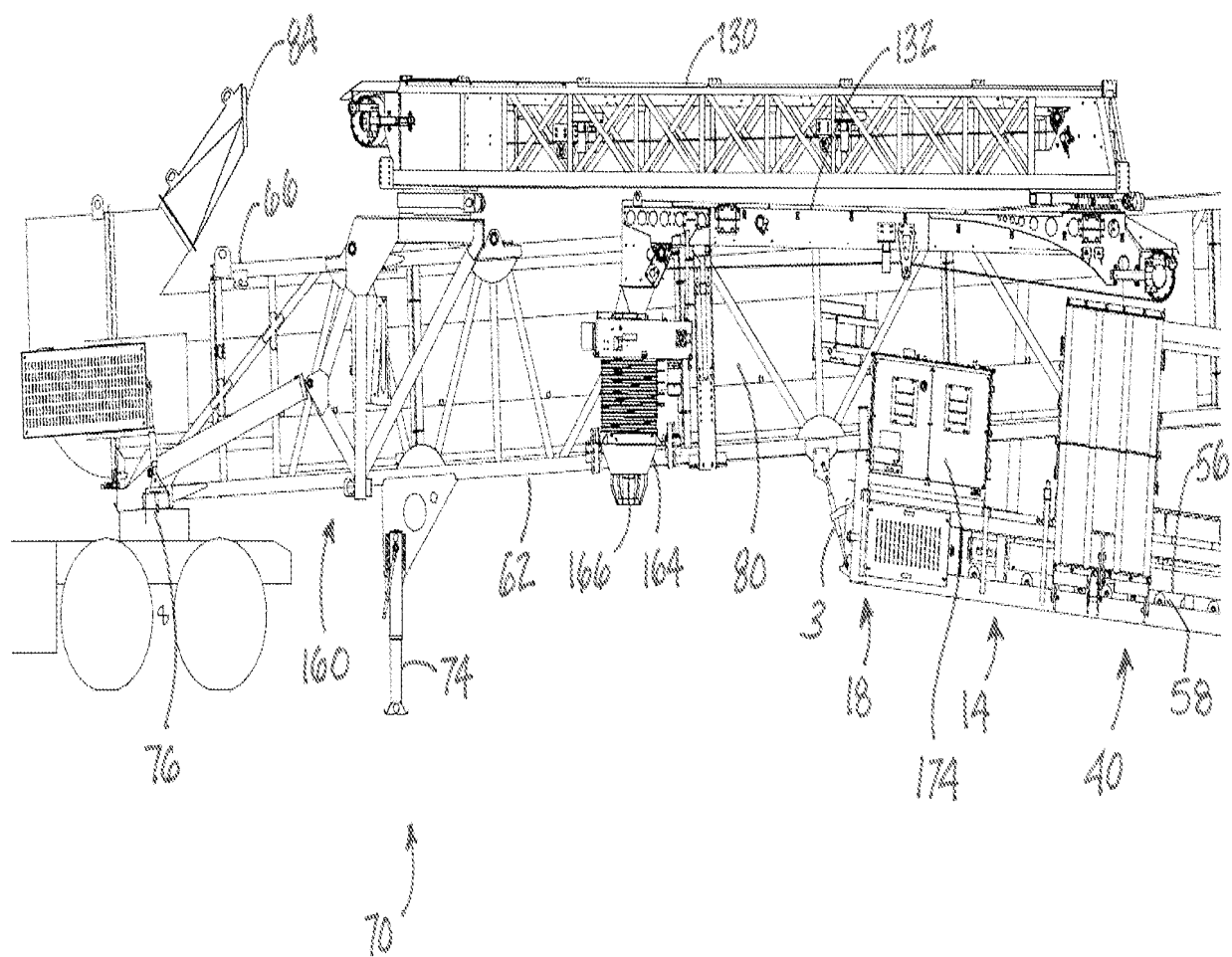
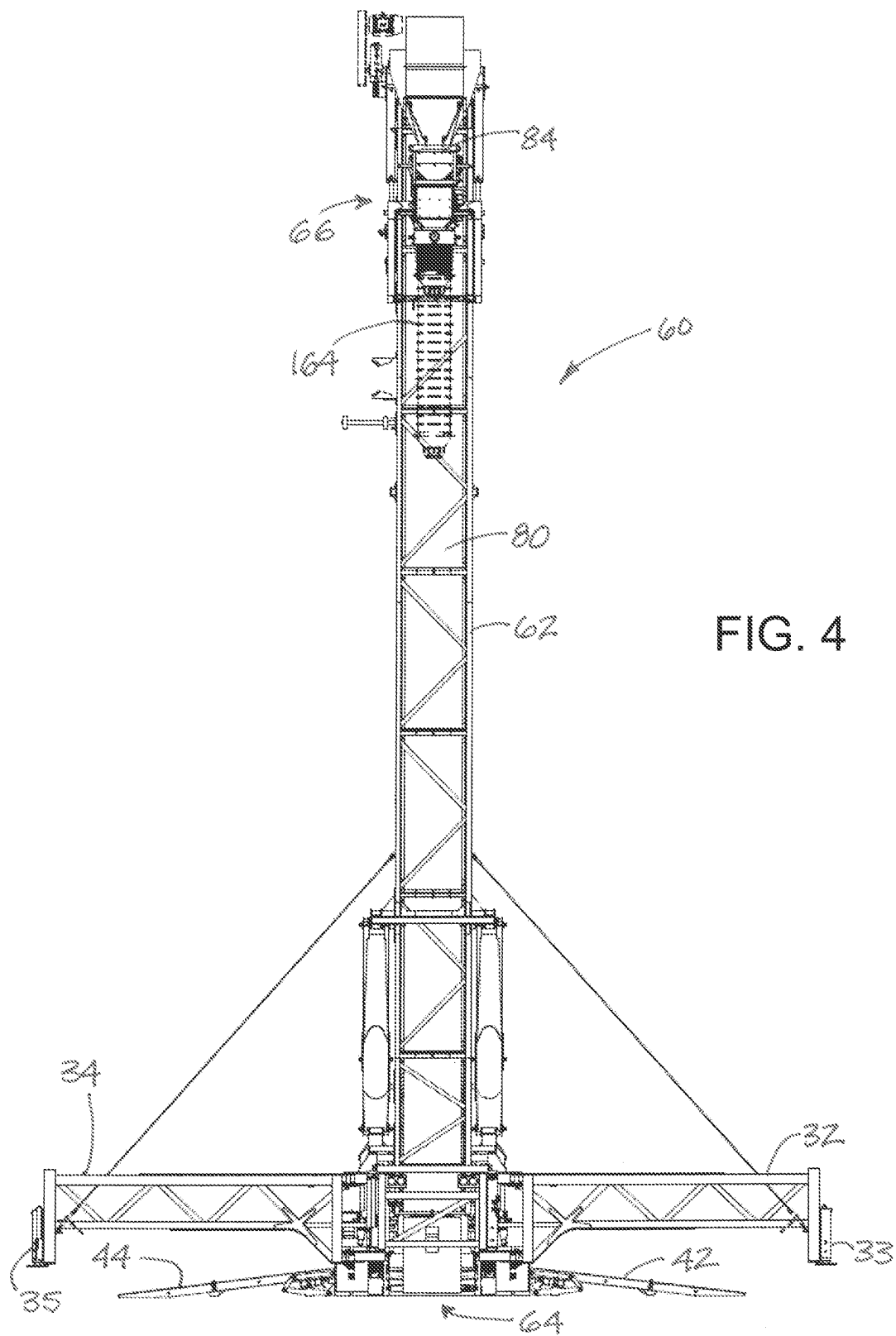


FIG. 3



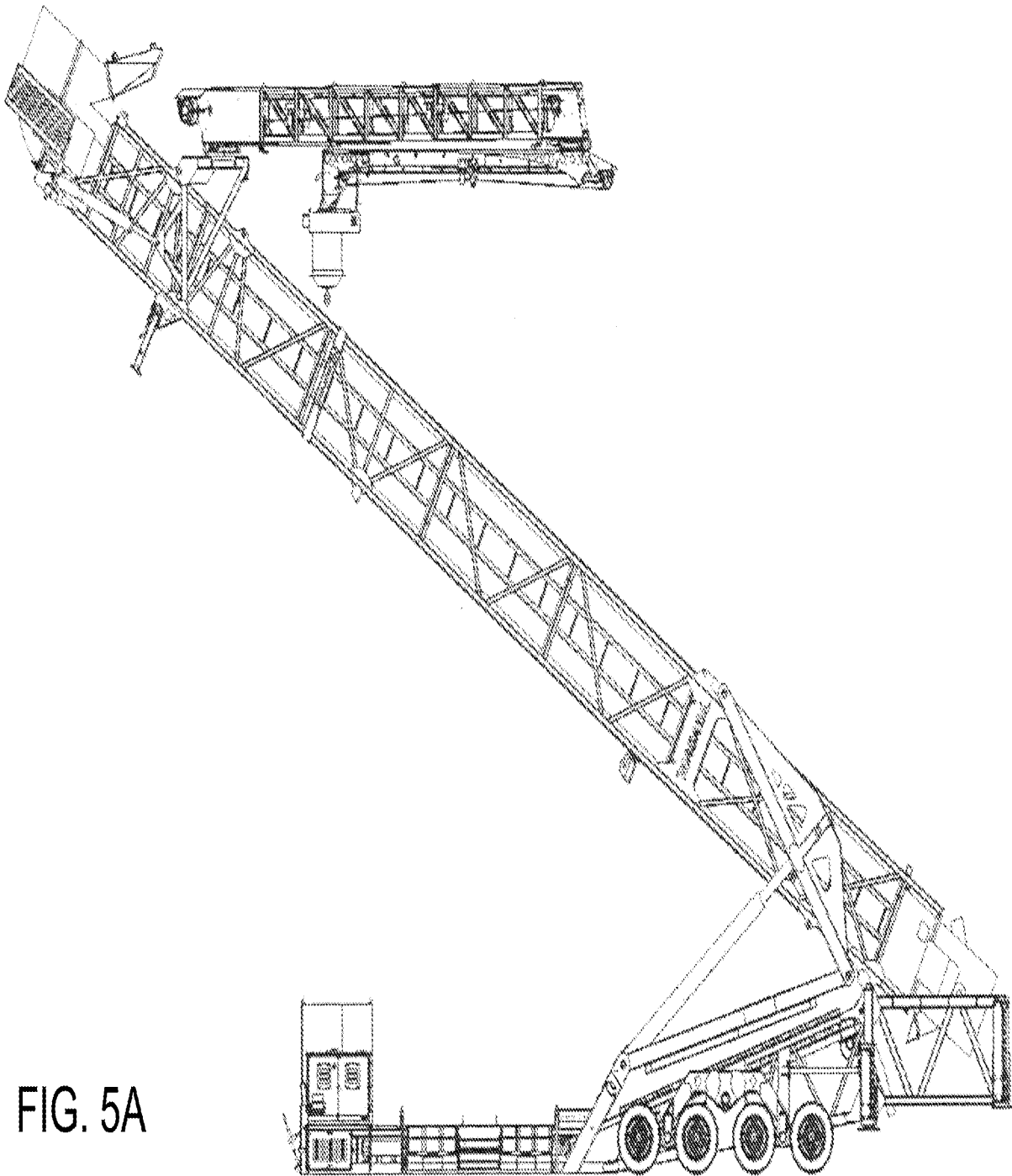


FIG. 5A

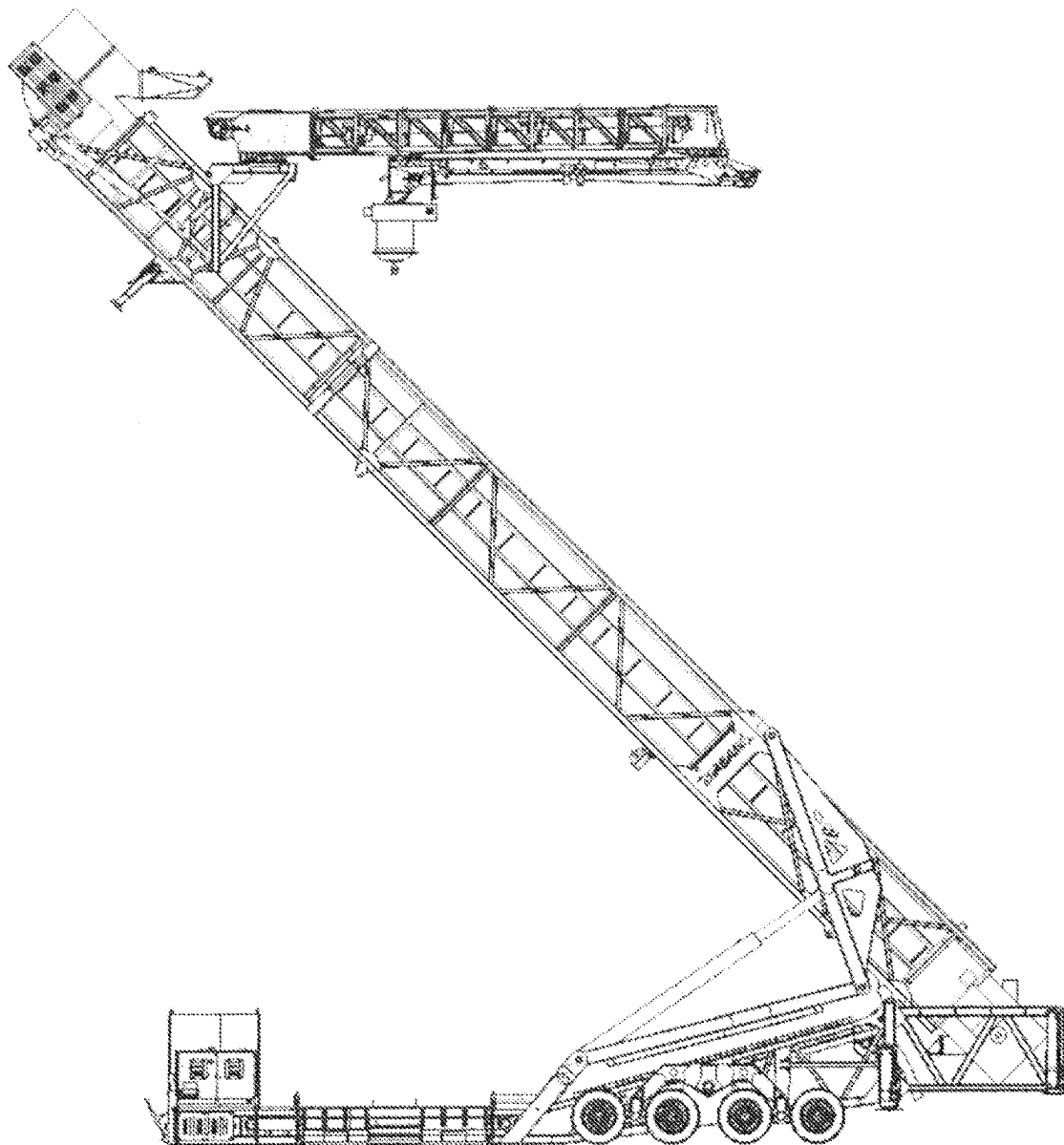


FIG. 5B

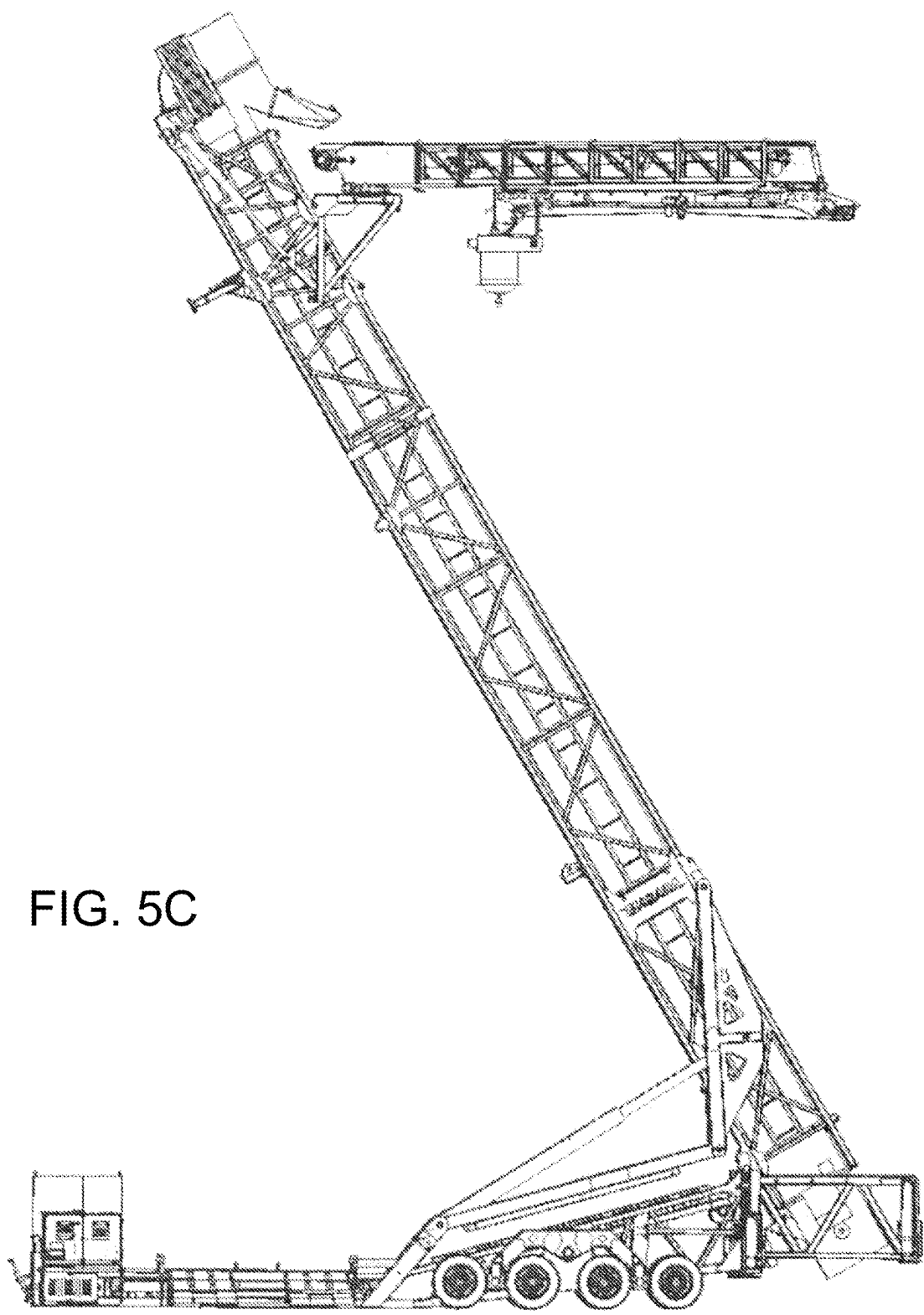


FIG. 5C

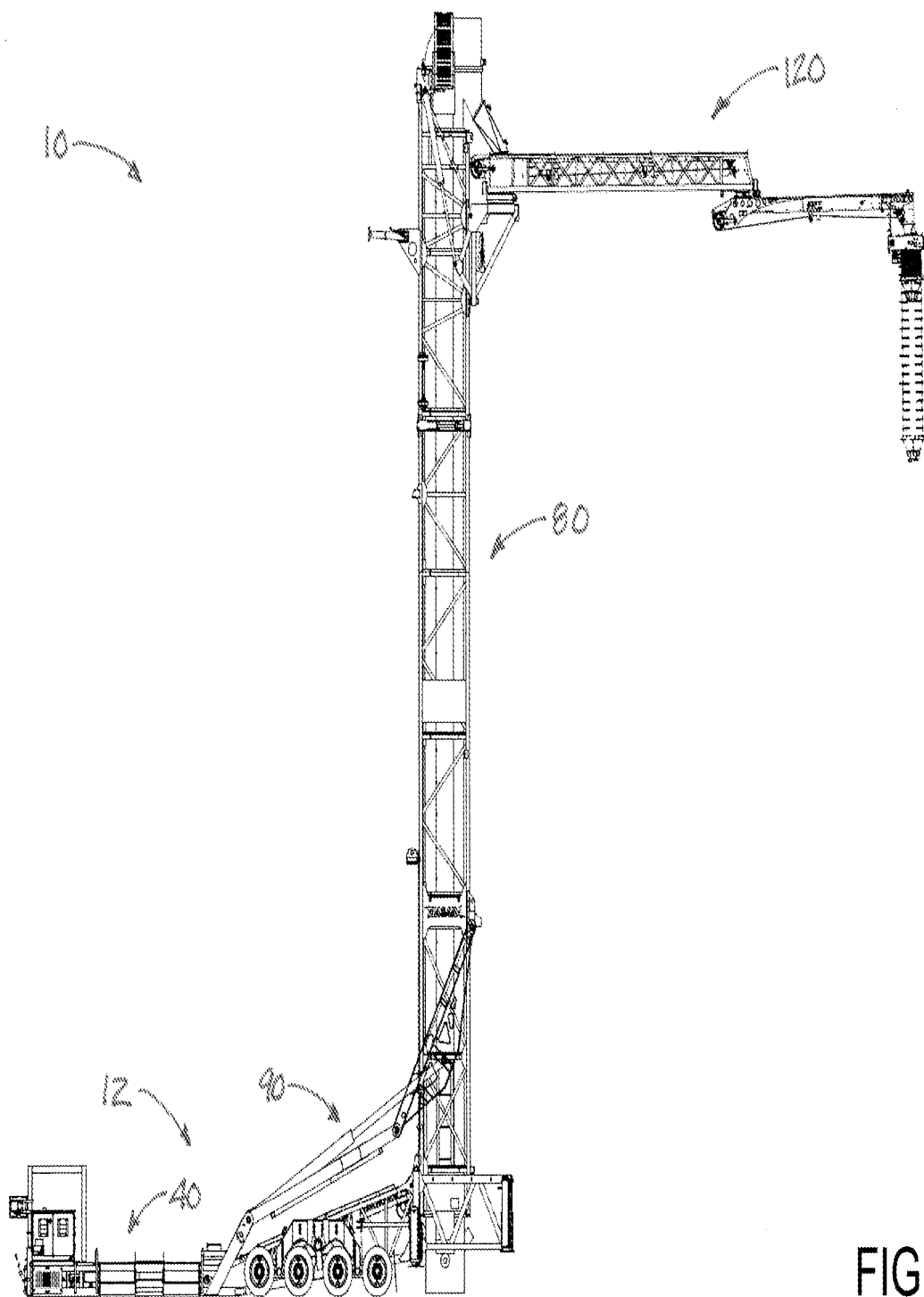


FIG. 5D

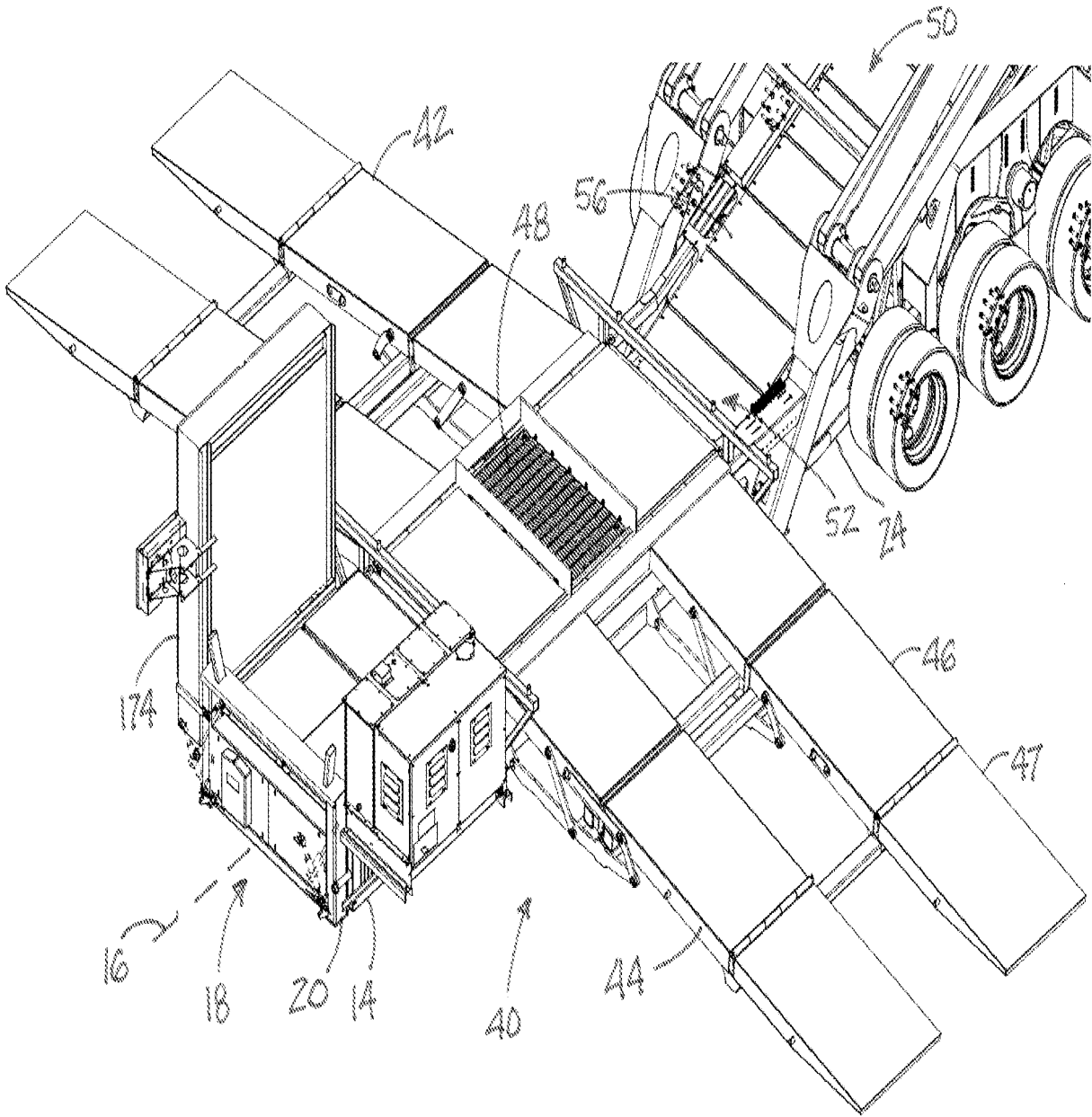
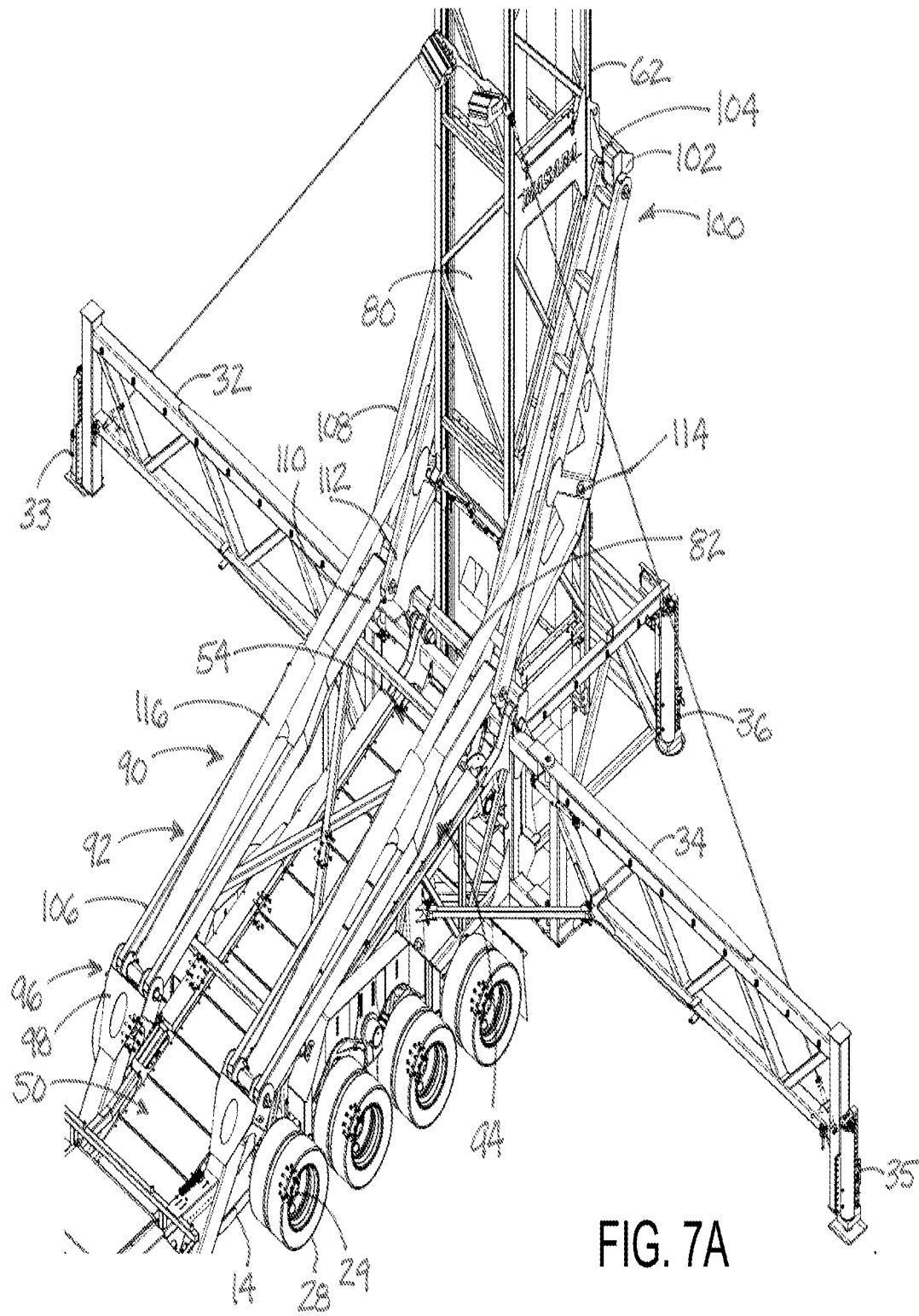


FIG. 6



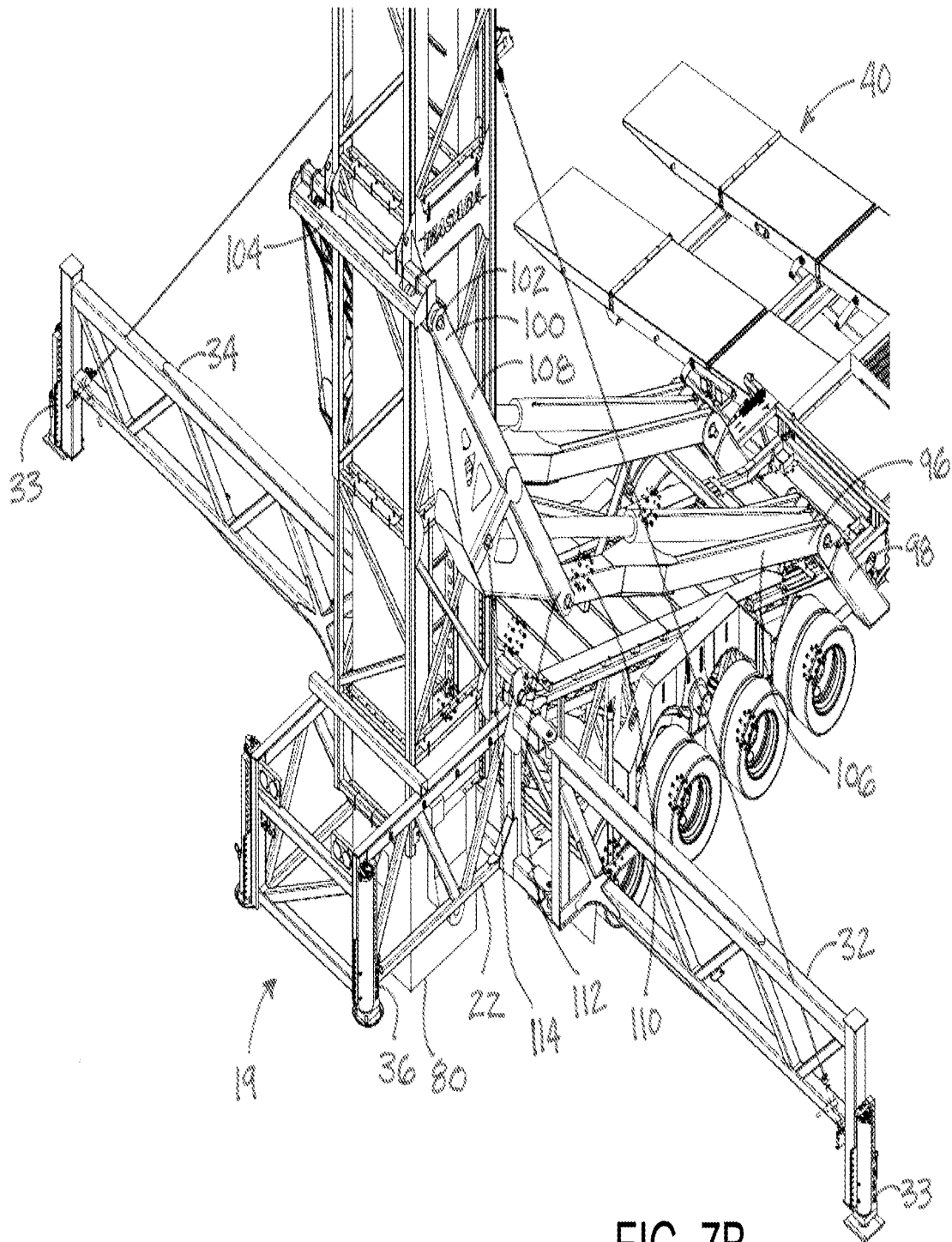


FIG. 7B

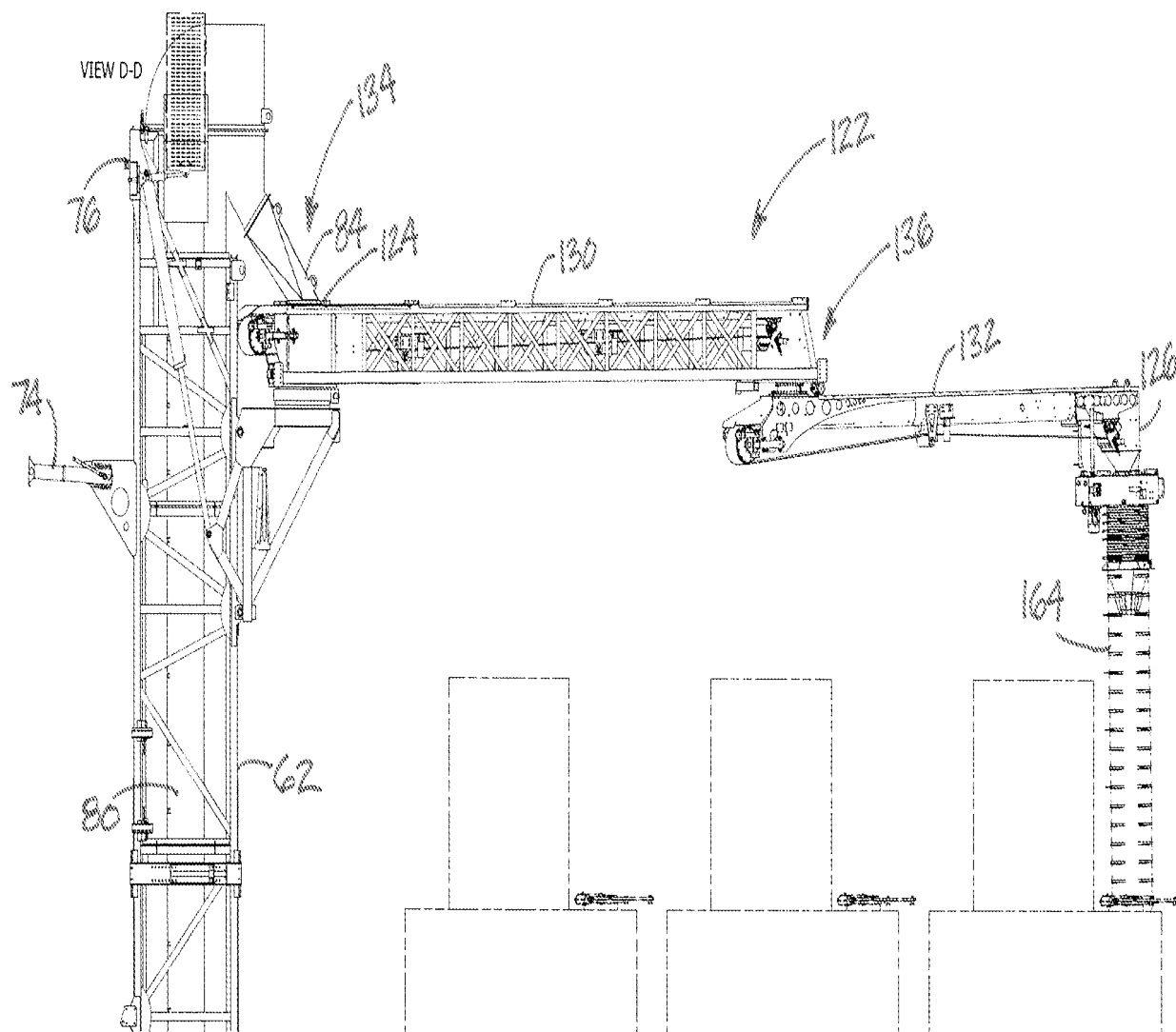
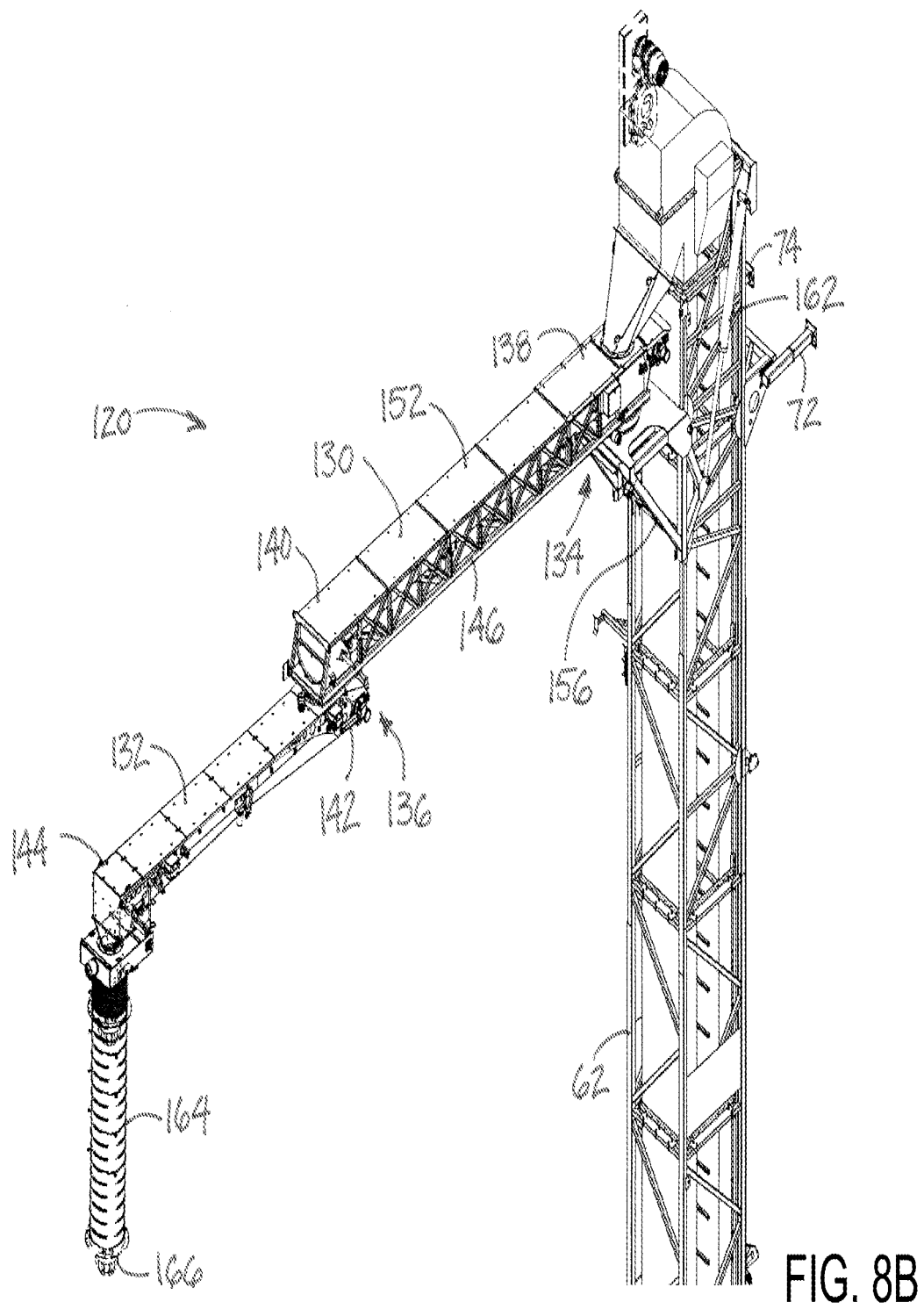


FIG. 8A



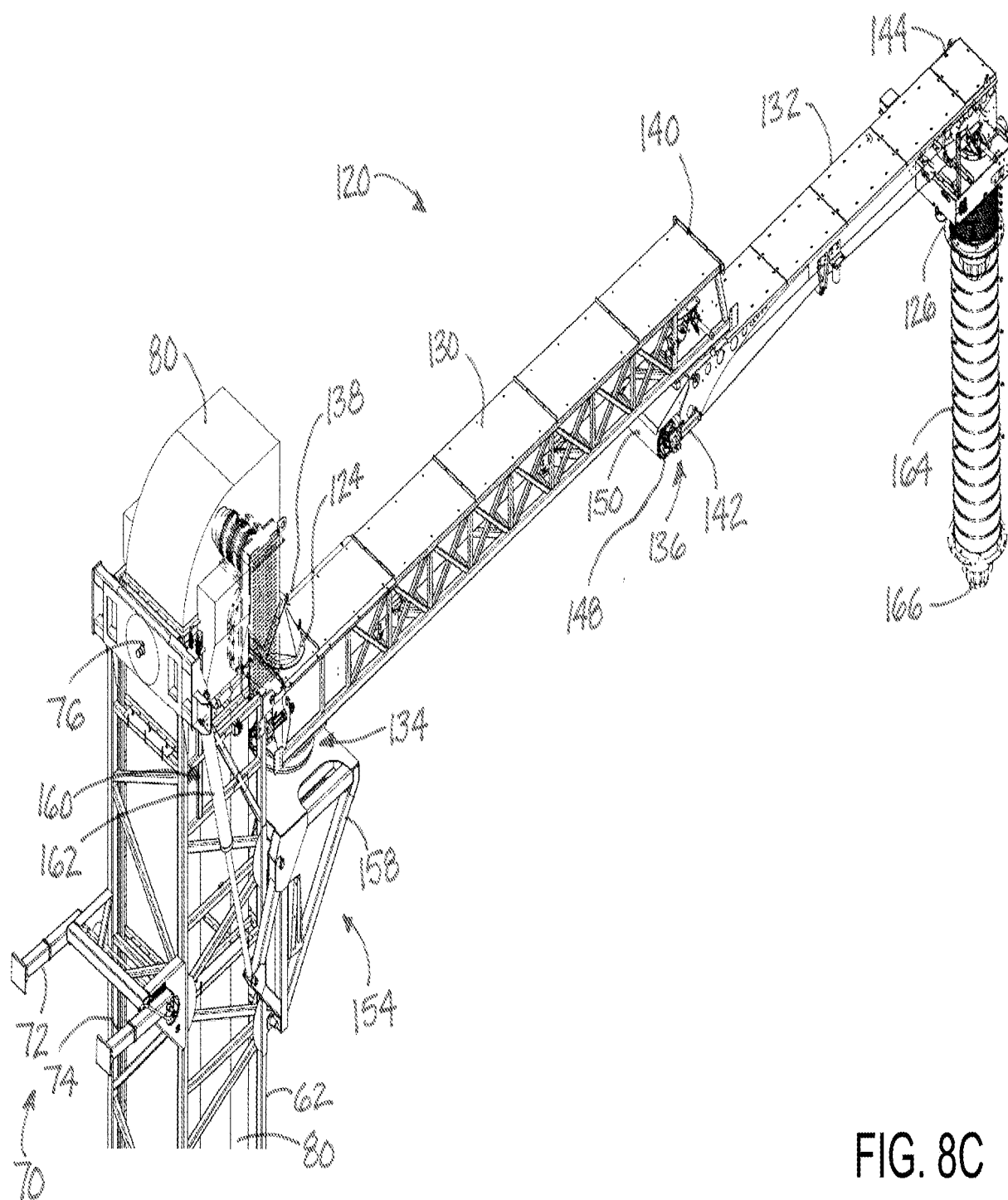


FIG. 8C

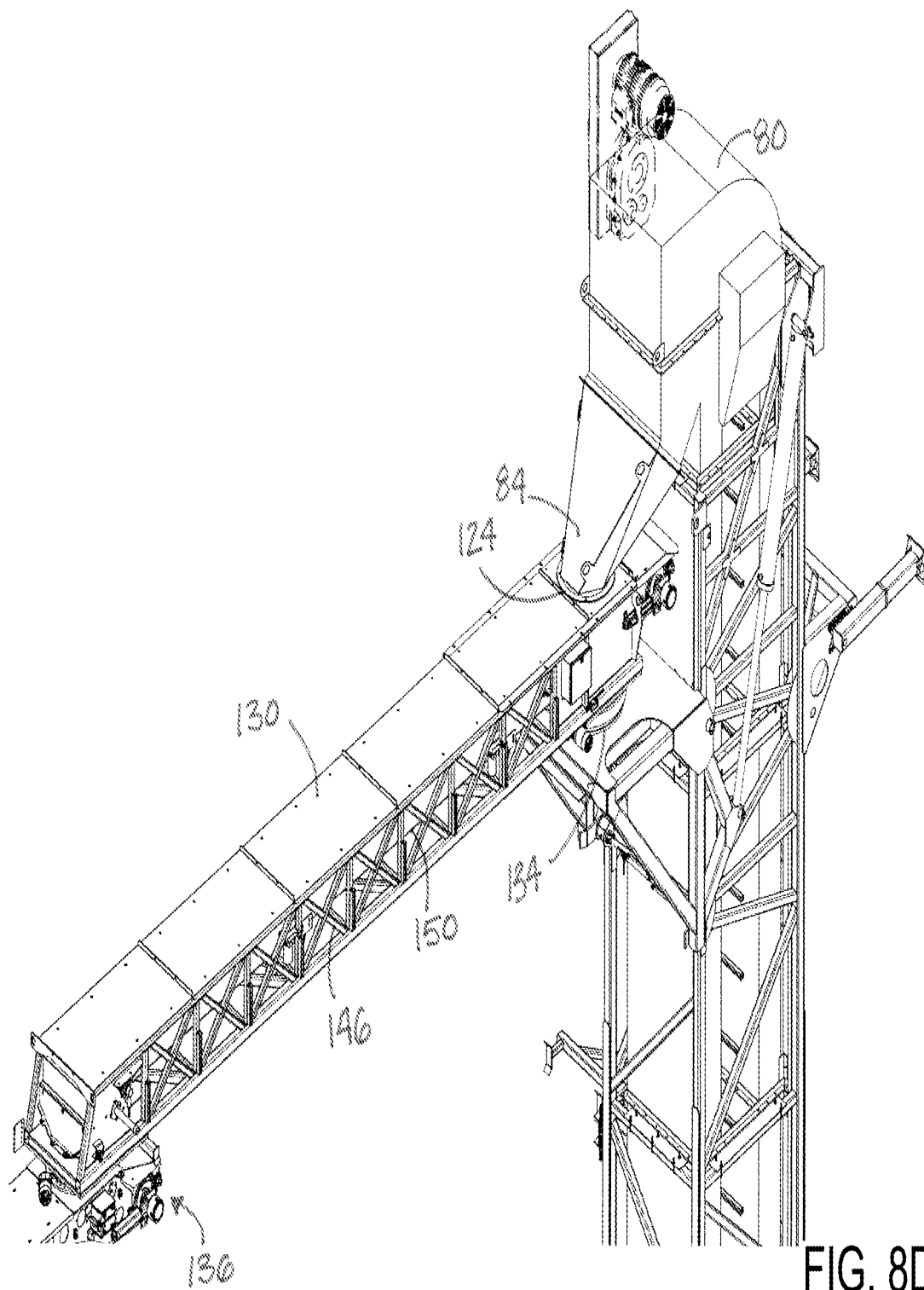


FIG. 8D

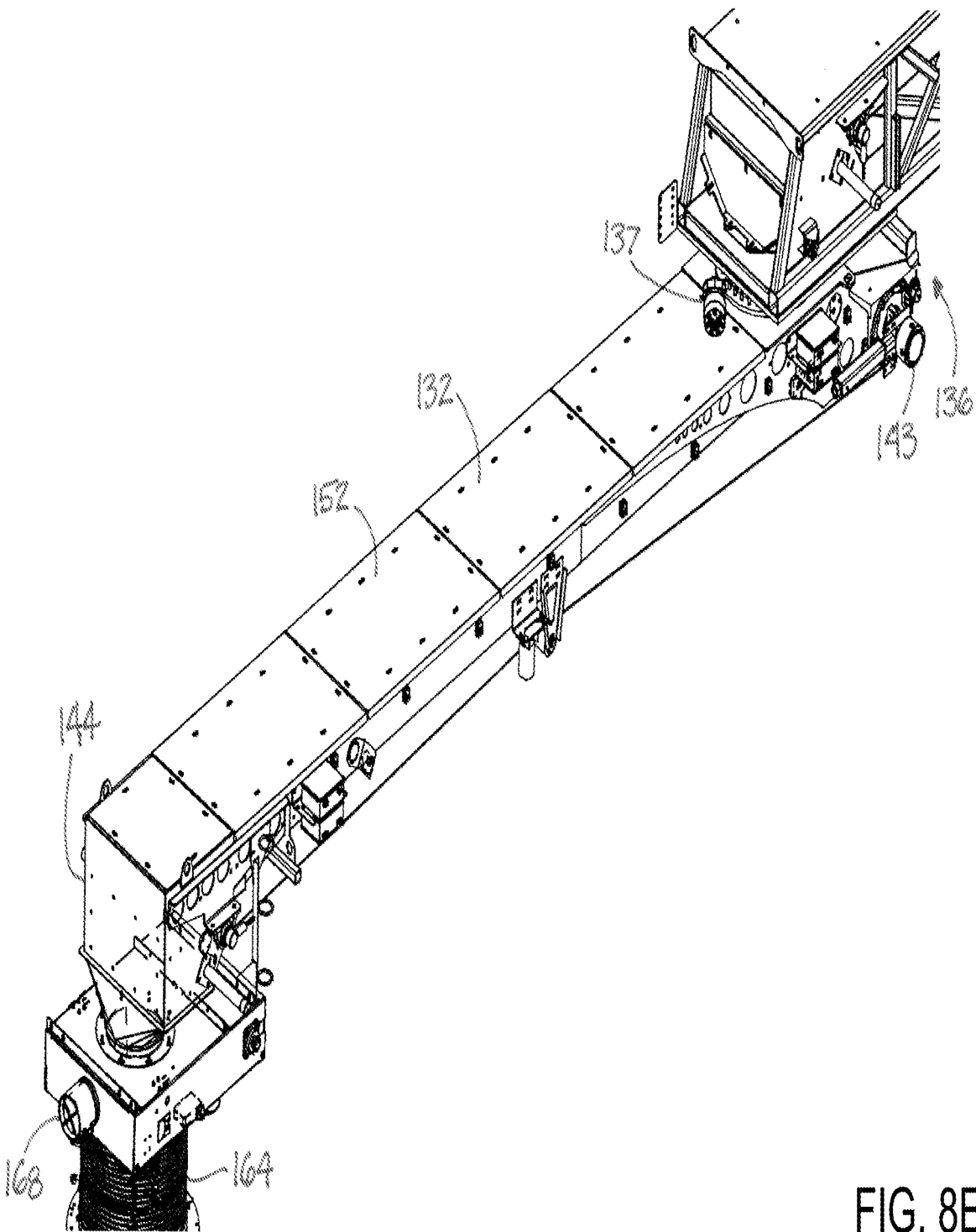


FIG. 8E

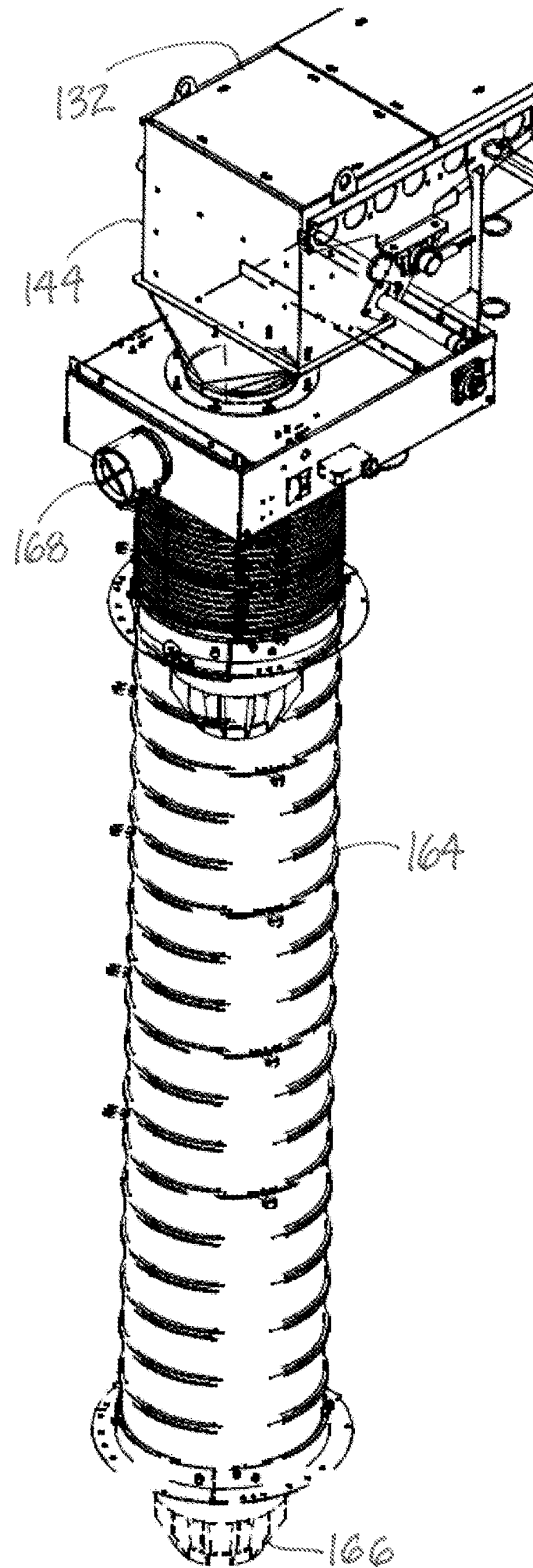


FIG. 8F

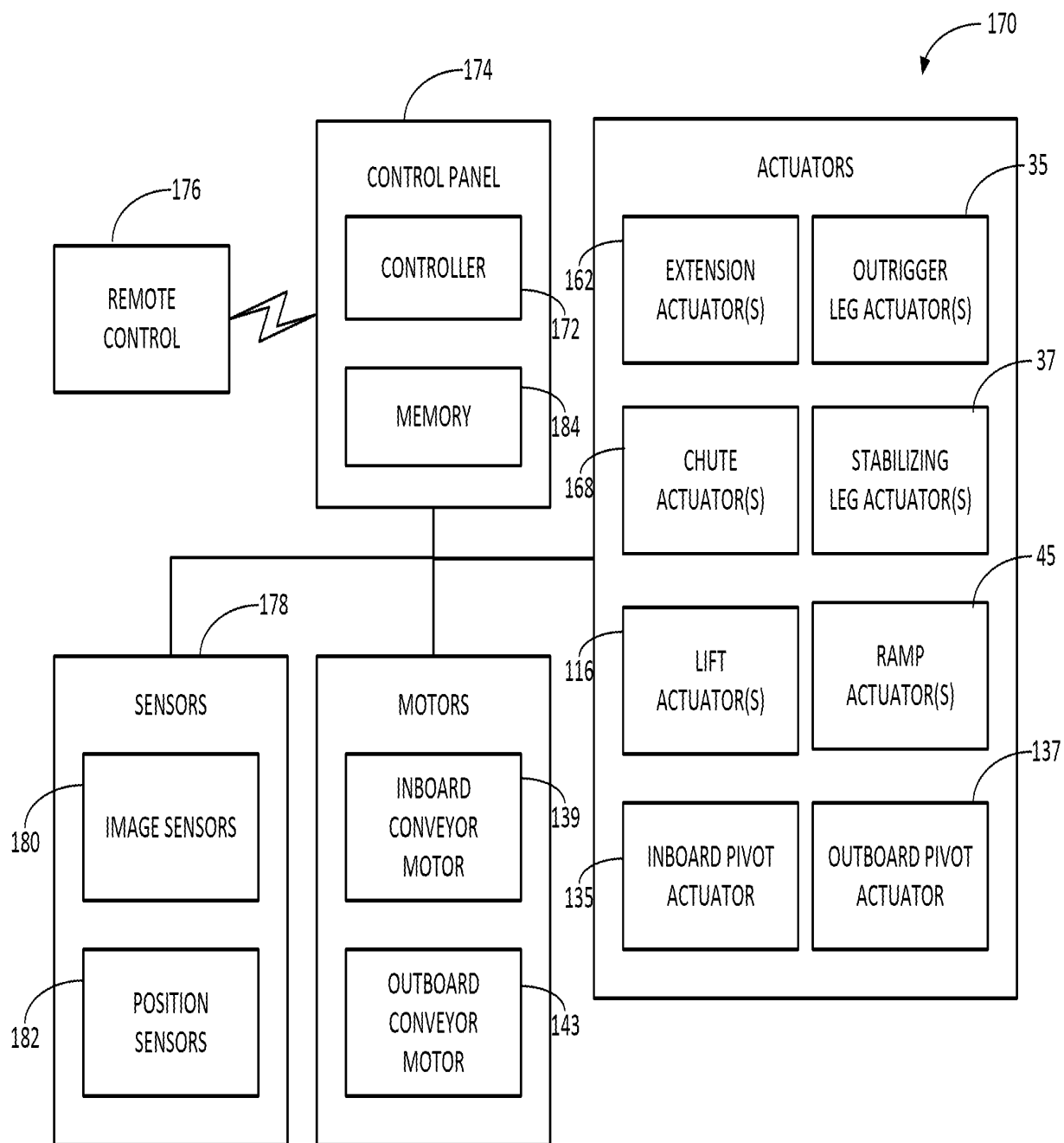


FIG. 9

DECLARATION AND POWER OF ATTORNEY

Title of invention:

AGGREGATE TRANSFERRING SYSTEM

As a below named inventor, I hereby declare that:

This declaration is directed to the attached application.

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

I believe I am the original inventor (if only one name is listed below) or an original joint inventor (if plural names are listed below) of a claimed invention in the 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.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment if applicable.

I acknowledge the duty to disclose information to the Patent and Trademark Office all information known to me to be material to the patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

I further state that I do not know and do not believe that the above-named invention has ever been known or used in the United States before my invention thereof, or patented or described in any printed publication in any country before my invention thereof, or in public use or on sale in the United States more than one year prior to this application; that the invention has not been patented or made the subject of any inventor's certificate in any country foreign to the United States on any application filed by me or my legal representatives or assigns more than one (1) year prior to this application; and that no application for patent or inventor's certificate on the invention has been filed by me or my representatives or assigns in any country foreign to the United States, except as identified below.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d) or Section 365(b) of any foreign application(s) for patent or inventor's certificate, or Section 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below any foreign application for patent or inventor's certificate or PCT International application having a filing date before that of the application on which priority is claimed:

<u>Prior Foreign Application(s)</u>		<u>Priority Claimed</u>		
<u>NONE</u> (Number)	<u> </u> (Country)	<u> </u> (Day/Month/ Year Filed)	<u> </u> (Yes)	<u> </u> (No)

I hereby claim the benefit under 35 U.S.C. Section 119(e) of any United States Provisional application(s) listed below:

<u>63/223,124</u> (Application No.)	<u>07/19/2021</u> (Filing Date)
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I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or Section 365 (c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, Section 112. I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

<u>NONE</u> (Application No.)	<u> </u> (Filing Date)	<u> </u> (Status - patented, pending, abandoned)
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

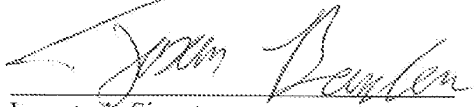
POWER OF ATTORNEY: As a named inventor, I/we hereby appoint as attorneys of record, with full power of substitution and revocation, to prosecute this application, and to transact all business in the U.S. Patent and Trademark Office connected therewith:

U.S.P.T.O. Customer No. **40158**

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Inventor's Signature

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Citizenship: **UNITED STATES OF AMERICA**

Post Office Address: **31286 BLUFF ROAD
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re U.S. Patent Application)
)
Applicant: JASON BRENDEN)
)
Serial No.: (unassigned))
)
Filed: (herewith))
)
For: AGGREGATE TRANSFERRING SYSTEM)
)
Examiner: (unassigned))
)
Art Unit: (unassigned))

Mail Stop Patent Application
Assistant Commissioner for Patents
United States Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

This statement is filed under the provisions of Rule 1.56 and the detailing of Rules 1.97 and 1.98.

With regards to the above-identified application, the items of information listed on the enclosed PTO/SB/08a are brought to the attention of the Examiner.

This statement should be considered because it is being submitted before the mailing date of a first Office Action on-the-merits. Accordingly, no fee is due for consideration of the items listed on the enclosed Form PTO/SB/08a.

No representation is made that a reference is "prior art" within the meaning of 35 U.S.C. §§102 and 103 and Applicants reserve the right, pursuant to 37 C.F.R. § 1.131 or otherwise, to establish that the

{IDS Cover Sheet.1}

reference(s) are not “prior art.” Moreover, Applicants do not represent that a reference has been thoroughly reviewed or that any relevance of any portion of a reference is intended.

Consideration of the items listed is respectfully requested. Pursuant to the provisions of M.P.E.P. 609, it is requested that the Examiner return a copy of the attached Form PTO/SB/08a, marked as being considered and initialed by the Examiner, to the undersigned with the next official communication.

Respectfully submitted,

WOODS, FULLER, SHULTZ & SMITH P.C.

/Jeffrey A. Proehl/
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Date: 2022-11-17