

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO	
RAD: 14-22208- -4	FECHA: 2016-06-13 09:25:34
DEP: 2020 DIRECCION DE NUEVAS CREACIONES	EVE: 1 REGISTRO/DEPOSITO/CONCESION/DEPOSITO
TRA: 2 PATENTES DE INVENCION	FOLIOS: 6
ACT: 519 TRASLADOINFORME	

DIRECCIÓN DE NUEVAS CREACIONES

2020
Bogotá, D.C.,

Abogado(a)/Señor(a)
CARLOS R. OLARTE GARCIA

Asunto: Radicación: 14-22208- -4
Trámite: 2
Evento: 1
Actuación: 519
Oficio: 7027
Folios: 6

Patente de Invención	X			Patente de Modelo de Utilidad	
Vía Nacional	X				
Vía PCT (Fase Nacional)		Capítulo I		Capítulo II	
No. Solicitud Internacional					
Fecha de Presentación Internacional					

Como resultado del Examen de Fondo realizado, con fundamento en el artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le comunica:

1. Documentos estudiados

Descripción:	Radicado N° 14-22208-0000-0000	03/Febrero/2014
	Radicado N° 14-22208-0002-0000	22/Abril/2014
Reivindicaciones:	Radicado N° 14-22208-0000-0000	03/Febrero/2014
	Radicado N° 14-22208-0002-0000	22/Abril/2014
Dibujos:	Radicado N° 14-22208-0000-0000	03/Febrero/2014

2. Objeto de la invención

De acuerdo con lo establecido en el numeral 1.2.2.2 del capítulo primero del Título X de la Circular Única para efectos del examen de patentabilidad, se tendrá en cuenta la tasa pagada por la solicitante al momento de comenzar el examen para las reivindicaciones adicionales; esto es que cuando la solicitud contenga más de diez (10) reivindicaciones y no se haya pagado la tasa complementaria, sólo se estudiarán las cubiertas por la tasa pagada. En el presente caso se estudiarán las reivindicaciones 1 a 6 del capítulo reivindicatorio (Radicado N° 14-22208-0002-0000).

Título de la solicitud: “Vehículo compactador de basuras” (Radicado N° 14-22208-0000-0000).

El problema planteado en esta solicitud consiste en la necesidad de proporcionar un camión compactador de basuras que permita recolectar la mayor cantidad de residuos, se aproveche la mayor cantidad de espacio de compactación, se ejecuten las funciones de los operadores de forma segura, y se manejen los lixiviados de una manera eficiente, de tal forma que se puedan recolectar en un espacio ajeno al de compactación y finalmente que permita la limpieza interna de manera automática.

Para resolver este problema técnico la solicitud en estudio proporciona un vehículo para prensar y compactar residuos, basuras y desperdicios, en el cual se hace un aprovechamiento más eficiente del espacio proporcionado por las carrocerías comunes y por lo tanto, el presente invento permite aumentar la cantidad de residuos compactados.

Está conformado internamente por un mecanismo para transportar residuos sólidos ubicados en el piso del compartimento. Dicho mecanismo está unido a una placa de compactación. Este mecanismo para transportar residuos sólidos junto con la placa tiene un movimiento horizontal, hacia adelante y hacia atrás, el cual permite transportar internamente los residuos y/o compactar los residuos sólidos.

El objeto de la presente solicitud se relaciona con la Clasificación Internacional de Patentes (CIP): B 30 B 9/30; B 65 F 3/20; B 65 F 3/28.

3. De la solicitud de patente

Titulo

El título no corresponde con el objeto de la solicitud porque los términos usados son muy generales y no especifican o describen elementos técnicos particulares de la invención, por lo cual se sugiere al solicitante hacer la corrección necesaria.

Reivindicaciones (Art 30 D 486, Art 22 PCT)

Las reivindicaciones 1 a 6 no son claras porque:

- Las expresiones: “(...) para transportar residuos sólidos sobre el piso del compartimento”, “(...) para permitir el movimiento horizontal de la placa a lo largo del compartimento de compactación”, “(...) que desplaza los residuos en dos direcciones, hacia adelante y hacia atrás dentro del compartimento de compactación”, “(...) que se abre para depositar los residuos sólidos;”, “(...) que se abre cuando se desocupan los residuos sólidos”, “(...) para alojar los residuos, en donde una vez se llena dicha tolva, se acciona un mecanismo para levantar la tolva hasta la parte superior del compartimento de compactación, se abre la compuerta superior, gira a través de un eje y deposita los residuos dentro del compartimento de compactación;”, “(...) que reciben los lixiviados que se producen en el momento de compactar los residuos sólidos”, “(...) que se pone en funcionamiento una vez se entrega los residuos sólidos en el sitio de disposición final.” (Reiv. 1); “(...) se mueve a través de un actuador tipo persiana horizontal que abre o cierra dicha compuerta” (Reiv. 2); “(...) que mueve la placa de compactación horizontalmente” (Reiv. 3); “(...) el cual permite el desplazamiento de los residuos sólidos hacia adelante y hacia atrás de la compactadora.” (Reiv. 6), corresponden a características funcionales, las cuales aunque explican la relación que hay entre diversas características estructurales y pueden estar incluidas en las reivindicaciones, no definen la invención; de tal manera no se tienen en cuenta para el estudio de patentabilidad.

- Las expresiones: “(...) la fuerza que aplica el sistema hidráulico es de 3000 a 3500 psi.” (Reiv. 4); “(...) la capacidad de carga del vehículo está comprendida entre 19.11 metros hasta 30.58 metros.” (Reiv. 5), son resultados a alcanzar puesto que la reivindicación incluiría no sólo la solución propuesta por el solicitante, sino todas las alternativas presentes o futuras que lleguen a ese resultado. Se sugiere reemplazarlo por las características esenciales, estructurales, que contribuyen a la obtención de ese efecto.

4. Determinación del Estado de la Técnica

El estado de la técnica se determinó con base en la fecha de presentación de la solicitud de patente nacional: febrero 3 de 2014, y se encontraron los siguientes documentos que anticipan el objeto de esta solicitud:

Ítem	Documento	Título	Fecha de Publicación
D1	US3280994	“Refuse collecting vehicle”	25/Octubre/1966
D2	US4694846	“Garbage truck with trash bin cleaning system”	22/Septiembre/1987

El documento D1¹ divulga un vehículo de recogida de basura incluyendo un portón trasero pivotante que tiene una tolva de carga con paredes laterales se extienden hacia arriba, una abertura de acceso en la parte trasera la tolva, una abertura en el cuerpo en el frente de la tolva. (Reiv. 1).

El documento D2² divulga un camión de basura para el manejo de grandes contenedores de basura que tiene un sistema incorporado en el mismo para la limpieza y desodorización de los contenedores después de que hayan sido vaciados. Inmediatamente después de que se ha vaciado la tolva en el compactador de basura y mientras está en una posición invertida, el recipiente se rocía con agua caliente expulsado de boquillas montadas en el camión en la parte trasera de la apisonadora. Esta operación de pulverización se controla desde la cabina del camión y se continúa el tiempo suficiente con un gran volumen suficiente de agua para asegurar una limpieza a fondo de la bandeja. (Resumen).

5. Examen de Patentabilidad (Art 14 D486)

Nivel inventivo (Art 18 D486)

La reivindicación 1 consiste en: “Vehículo recolector y compactador de basuras y desperdicios, caracterizado porque comprende...” (Ver pág. 12 del Radicado N° 14-22208-0002-0000).

Comparación de las características técnicas esenciales, con las del estado de la técnica:

Características esenciales	D1	D2
Un compartimento para la compactación de residuos con un mecanismo.	Una placa de compactación (28) está montada de forma deslizante dentro del cuerpo (20) para el movimiento desde una posición cerca de la parte frontal del cuerpo (20) a una posición más retrasada	Un compartimento para recibir la basura. (Reiv. 1)

1http://worldwide.espacenet.com/publicationDetails/originalDocument?CC=US&NR=3280994A&KC=A&FT=D&ND=4&date=19661025&DB=&locale=en_EP

2http://worldwide.espacenet.com/publicationDetails/description?CC=WO&NR=2008023884A1&KC=A1&FT=D&ND=3&date=20080228&DB=EPODOC&locale=en_EP

	en la misma, ilustrada en la Figura. 2 (Pág. 4, Col. 2, Líneas 65 a 70, Fig. 2)	
Una placa de compactación acoplada funcionalmente a un sistema hidráulico.	Un cilindro hidráulico (33) (Fig. 2) está conectado de forma pivotante en el centro de la esquina delantera superior de la pared superior y frontal del cuerpo (20) y tiene un vástago (34) conectado de manera pivotante a un miembro giratorio (35) en el centro de la placa de expulsión (28). (Pág. 5, Col. 1, Líneas 4 a 10)	No menciona.
Un mecanismo de transporte.		No menciona.
Una compuerta en la parte superior trasera del compartimento de compactación.	No menciona	Posición de vaciado por encima del compartimento de desechos (Fig. 2)
Una compuerta que se abre cuando se desocupan los residuos sólidos, por medio de cilindros hidráulicos, el movimiento horizontal de la placa compactadora y el mecanismo de transporte.	Un portón trasero, generalmente indicado por el número de referencia (23), y se muestra en posición cerrada o hacia abajo en la Figura. 1 y en la posición elevada o abierta en la figura. 2. (Pág. 4, Col. 2, Líneas 55 a 60)	No menciona.
Una tolva acoplada a la parte trasera del vehículo.	Una tolva de recepción en la parte trasera del vehículo. (Pág. 4, Col. 2, Líneas 10 a 15)	No menciona.
Tanques en la parte inferior del compartimento.	No menciona.	Tanque (20) (Pág. 4, Col. 1, Líneas 60 a 65)
Un sistema de auto-lavado.	No menciona.	Un sistema para el lavado y la desodorización de los contenedores. (Pág. 4, Col. 1, Líneas 5 a 10)

El documento D1 se considera el estado de la técnica más cercano a la invención definida en la reivindicación 1 porque divulga un vehículo de recogida de basura incluyendo un portón trasero pivotante que tiene una tolva de carga con paredes laterales se extienden hacia arriba, una abertura de acceso en la parte trasera la tolva, una abertura en el cuerpo en el frente de la tolva. (Reiv. 1).

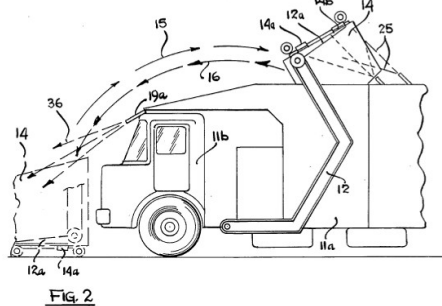
La diferencia entre la invención, definida en la reivindicación 1 y el aparato divulgado en D1 consiste en que incorpora una puerta de acceso en la parte superior del contenedor de desechos y un sistema de limpieza, mediante tanque de almacenamiento y aspersión de chorros de agua, para el espacio de contenedor de desechos.

El efecto que logra el incluir dicha compuerta y el sistema de limpieza es que, la primera permite vaciar el contenido de la tolva de desechos, desde una posición superior, minimizando el contacto de los desechos por parte de los operarios de la recolección. Por otra parte, los componentes del sistema de limpieza contribuyen a efectuar un lavado del espacio de contenedor donde se vacían los desechos, evitando así problemas de deterioro del aparato y también, problemas de salud para los operarios.

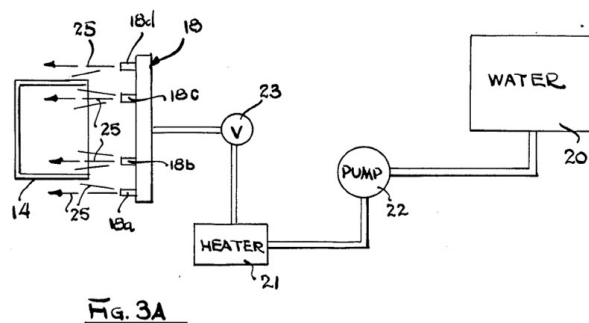
Por lo tanto, el problema técnico objetivo que pretende resolver esta invención se puede formular así: ¿Cómo modificar el aparato conocido en D1 para lograr introducir los desechos desde la parte superior del espacio contenedor de desechos e incorporar un sistema de limpieza al mismo contenedor, para lograr una disminución del contacto de los desechos por parte de los operarios y así brindar una operación más eficiente y

segura del aparato?

Sin embargo, la utilización de un espacio de acceso en la parte superior del contenedor, ya está divulgada en el documento D2, que se refiere a la posición de vaciado por encima del compartimiento de desechos (Fig. 2).



De igual forma, un sistema de limpieza para el contenedor o tolva, que se voltea en la parte superior del contenedor de desechos, está divulgado en D2, donde se refiere a un sistema para el lavado y la desodorización de los contenedores. (Pág. 4, Col. 1, Líneas 5 a 10, Fig. 3a)



En consecuencia, el la persona del oficio normalmente versada en la materia, incluiría tanto la compuerta de acceso o descarga de desechos en la parte superior del contenedor, como los componentes del sistema de limpieza mencionados del documento D2, en el aparato divulgado en el documento D1 para llegar así al objeto de la reivindicación 1 de la solicitud. Por lo cual se considera obvia.

Asimismo, el documento D1 divulga las características de las reivindicaciones dependientes así:

- Reivindicación 3: Un cilindro hidráulico (33) (Fig. 2) está conectado de forma pivotante en el centro de la esquina delantera superior de la pared superior y frontal del cuerpo (20) y tiene un vástago (34) conectado de manera pivotante a un miembro giratorio (35) en el centro de la placa de expulsión (28). (Pág. 5, Col. 1, Líneas 4 a 10)

6. Conclusión

Los requisitos de Patentabilidad de la presente solicitud están afectados así:

Ítem	Documento	Reivindicaciones afectadas	Requisito que afecta
D1	US3280994	1 y 3	Nivel Inventivo
D2	US4694846	1	Nivel Inventivo

En cumplimiento del artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le indica que debe dar respuesta dentro del término de sesenta (60) días contados a partir de la fecha de notificación de la presente comunicación. En caso de no dar respuesta al presente requerimiento, o si a pesar de la respuesta subsistieran los impedimentos para la concesión, se denegará la patente.

Si como respuesta a este requerimiento el solicitante llegara a modificar: i) el capítulo reivindicatorio, ii) la descripción de la invención a proteger, iii) o presente un nuevo capítulo reivindicatorio, y desee que se realice un nuevo examen de patentabilidad a esta modificación, no deberá pagar la tasa de modificación voluntaria pero sí la correspondiente a la tasa de examen de patentabilidad. En todo caso, el número de requerimientos por no patentabilidad estará supeditado a que el término del estudio de patentabilidad no sea superior a 18 meses, contados desde la publicación de la solicitud de patente de invención. Adicionalmente, se le recuerda al solicitante que si como respuesta a este requerimiento llegara a modificar el capítulo reivindicatorio y éste contenga más de diez (10) reivindicaciones deberá pagar la tasa por reivindicación adicional.

Notifíquese el presente oficio conforme a lo dispuesto en el numeral 5.2, literal e), del capítulo quinto del título primero de la Circular Única No. 10 de 2001.



JOSÉ LUIS SALAZAR LÓPEZ
Director de Nuevas Creaciones (c)

El anterior requerimiento fue notificado por fijación en lista, de fecha 2016-06-21

Elaboró: Oscar Ivan Orduz Berdugo

Revisó: Sonia Andrea Diaz Pirazan

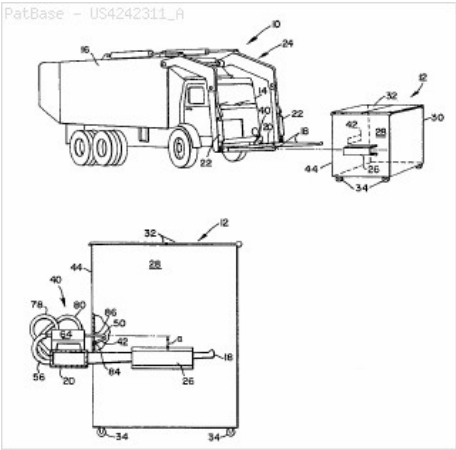
Search history

Search TAC=(vehiculo and compactador and (basura or residuos)) (Results 16)
1:
Search PN=(us3280994) (Results 1)
2:
Search [SP]: refuse collecting vehicle (claim 1) 1.in a refuse collecting vehicle body including a pivotal tailgate having a loading hopper with parallel up-wardly extending sidewalls, an access opening at the rear of the hopper, an opening into the body at the front of the hopper, and having a packer blade extending across 20 the hopper between the sidewalls for moving refuse from the hopper into the body, the improvement comprising a pair of parallel opposed guide tracks, one of said guide tracks in each of said sidewalls, guide means on the sides of said packer blade engaged with said guide tracks, a 25 pair of parallel, opposed guide links, each of said guide links having a first end and a second free end, means for mounting each of said first ends of said guide links to one of said hopper sidewalls above said guide tracks in an upper rear quadrant thereof, said guide links being operatively mounted to said sidewalls on means extending between said guide links for pivotal movement around an axis of rotation extending between said sidewalls, said free ends of said guide links extending generally forwardly of such axis of rotation, means pivotally mounting each of said free ends of said guide links to said packer blade, said guide tracks and guide links being effective for guiding the movement of the bottom edge of said packer blade through a closed path from a first position adjacent the rear end of such body, thence rearwardly over refuse in said hopper, thence downwardly behind such refuse, and thence forwardly through said hopper to said first position for moving refuse out of said hopper into said body, means effective for preventing downward 45 movement of said packer blade at the beginning of a rearward movement of said packer blade from said first position thereof, and power means connected to said packer blade for moving said packer blade. (Results 10)
Search TAC=((vehicle or truck) and (collect* or compact*) and (garbage or refuse%) and hopper) (Results 613)
4:
Search TA=((vehicle or truck) and (collect* or compact*) and (garbage or refuse%) and hopper) (Results 388)
5:
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6:
Search PN=(FR1166080 A OR US3682336 A OR US3554398 A OR US3739927 A OR US5190433 A OR EP0913343 A1 OR US2007048114 AA OR US7374389 BB OR US4149642 A OR WO15060719 A1) (Results 9)
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17:
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18:
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19:
Search TA=(spray* and system and truck and garbage) (Results 19)
20:

Title: **Garbage** and trash container select **spray system**

Abstract: Source: US4242311A A **system** for selectively **spraying** a treating material such as an insecticide and/or odor suppressor into the interior of a commercial **garbage** or trash container. The **system** includes a suitable **spray** nozzle assembly carried on the cross bar of the lifting frame of a conventional front loading sanitation **truck** and a biased access door in the trash container or bin through which a **spray** nozzle may be inserted into the interior of the container. A container of the insecticide and/or odor suppressor is carried on the **truck** together with controls placed in the vehicle's cab and controlled by the operator to insert the **spray** nozzle into the container, **spray** the container's interior, and retract the **spray** nozzle.

Classifications:
International (IPC 8-9): B08B9/08 B65F7/00 (Advanced/Invention); B08B9/08 B65F7/00 (Core/Invention)
International (IPC 1-7): A61L11/00 A61L2/18 B08B3/10 B08B9/00
CPC: B08B9/0826 B65F7/005
European: B08B9/08H2 B65F7/00D
US: 134/167R 134/172 422/302 422/5



Family:

Publication number	Publication date	Application number	Application date
US4242311 A	19801230	US19790018498	19790308

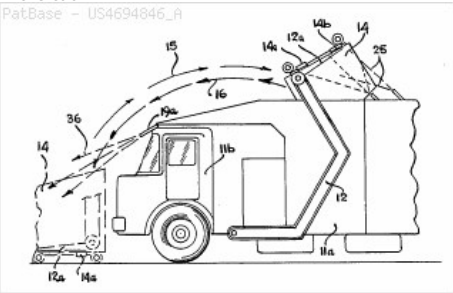
Priority:
US19790018498 19790308

Probable Assignee: MIDDAUGH RALPH E
Assignee(s): (std): MIDDAUGH RALPH E
Inventor(s): (std): MIDDAUGH RALPH E

Title: **Garbage truck** with trash bin cleaning **system**

Abstract: Source: US4694846A A **garbage truck** for handling large trash bins has a **system** incorporated therein for cleaning and deodorizing the bins after they have been emptied. Immediately after a bin has been emptied into the **garbage truck** trash compactor and while it is in an inverted position, the bin is **sprayed** with hot water ejected from nozzles mounted on the **truck** to the rear of the compactor. This **spraying** operation is controlled from the cab of the **truck** and is continued long enough with a large enough volume of water to insure thorough cleaning of the bin. After the bin has been washed it is returned to its original position on the ground and **sprayed** with deodorant from jet nozzles mounted on the top of the **truck** cab, this operation also being controlled by an operator in the cab.

Classifications:
International (IPC 8-9): B08B9/08 B65F7/00 (Advanced/Invention);
B08B9/08 B65F7/00 (Core/Invention)
International (IPC 1-7): A61L11/00 B08B3/02 B08B9/08
CPC: B08B9/0826 B65F7/005
European: B08B9/08H2 B65F7/00D
US: 134/115R 134/152 134/153 134/170 134/171 134/78 422/302 422/303



Family:

Publication number	Publication date	Application number	Application date
US4694846 A	19870922	US19860905197	19860909

Priority:
US19860905197 19860909

Probable Assignee: BOUCHARD ROLAND D
Assignee(s): (std): BOUCHARD ROLAND D
Inventor(s): (std): BOUCHARD ROLAND D

Title: PORTABLE WATER DRIVEN HIGH VELOCITY FAN

Abstract: Source: US5013214A An portable water driven high velocity fan. Contained in a cylindrical housing is a turbine nozzle body in which a plurality of cylindrical or part cylindrical and part conical nozzles are provided. The nozzles make an angle of about 10 to 30 degrees with the nozzle outlet surface of the nozzle body. A method of manufacture is provided which permits the manufacture of fans having various power ratings using the same standard machined parts.

Classifications:

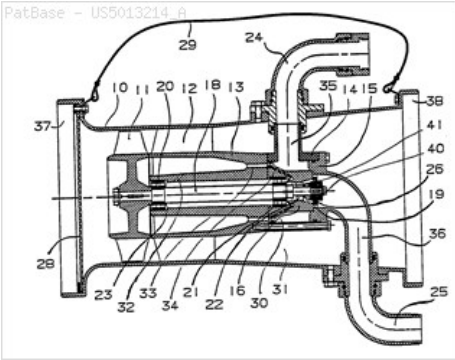
International (IPC 8-9): A62C3/02 F01D15/08 F02B39/08 F02B39/14 F03B1/00 F04D25/04 (Advanced/Invention);
A62C3/00 F01D15/00 F02B39/00 F03B1/00 F04D25/02 (Core/Invention)

International (IPC 1-7): F01D9/02 F02B33/40 F02B39/08 F03B1/04 F03B3/12 F03B3/18 F04B17/00

CPC: A62C3/0207 F02B39/08 Y10S415/912 Y02P70/525 F01D15/08 F02B39/14 F02B2275/32 F03B1/00 F04D25/04 Y02E10/223 Y02T10/142

European: A62C3/02B F01D15/08 F02B39/08 F02B39/14 F03B1/00 F04D25/04 R02B275/32 Y02E10/22B

US: 123/561 123/565 169/91 415/200 415/202 415/208.1 415/211.2 415/912 416/241.00A 416/241A 417/406 417/408 417/409



Family:

Publication number	Publication date	Application number	Application date
DE69008061 D1	19940519	DE19906008061	19900202
DE69008061 T2	19941110	DE19906008061T	19900202
EP0408729 A1	19910123	EP19900902958	19900202
EP0408729 A4	19910703	EP19900902958	19900202
EP0408729 B1	19940413	EP19900902958	19900202
US5013214 A	19910507	US19890306699	19890206
US5125797 A	19920630	US19900582143	19900914
US5236305 A	19930817	US19920890370	19920526
US5346364 A	19940913	US19930104196	19930810
US5421310 A	19950606	US19940214226	19940317
US5471965 A	19951205	US19940344231	19941123
WO9008880 A1	19900809	WO1990US00713	19900202
WO9525220 A1	19950921	WO1994US10197	19940912

Priority:

US19890306699 19890206	WO1990US00713 19900202	US19900582143 19900914
US19920890370 19920526	US19900655575 19901224	US19930104196 19930810
US19940344231 19941123	US19940214226 19940317	

Probable Assignee: KAPICH DAVORN CARLSBAD CALIF

Assignee(s): (std): KAPICH DAVORIN ; KAPICH DAVORN

Assignee(s): KAPICH DAVORN CARLSBAD CALIF ; KAPICH DAVORN CARLSBAD CALIF US ; KAPICH DAVORIN D

Inventor(s): (std): KAPICH DAVORN ; KAPICH DAVORIN D ; KAPICH DAVORIN

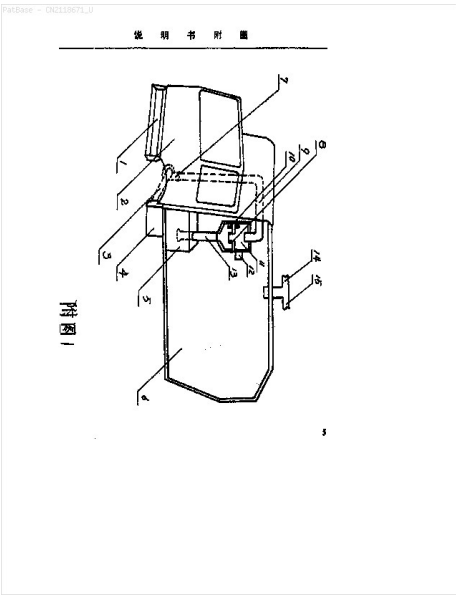
Inventor(s): KAPICH DAVORN CARLSBAD CALIF US ; KAPICH DAVORN CARLSBAD CALIF

Designated states: AT BE CH DE DK ES FR GB GR IE IT JP LU MC NL PT SE

Title: BUILT-IN VACUUM CLEANER FOR FIRE TRUCK OR STREET CLEANING TRUCK

Abstract: Source: CN2118671U The utility model discloses a smoke and garbage sucking and dust removing device for a fire truck or street cleaning truck. A water flow spraying pump, a water discharging gas dispersing gas tank, a water tank, a water pipe and a water pump are arranged in a truck tank to form a vacuum system for sucking the smoke and garbage and removing the dust. The smoke and garbage sucking and dust removing device can decrease the smoke threats of the fireman and reduce the dust environment pollution of the cleaning truck.

Classifications:
International (IPC 8-9): B60S1/64 (Advanced/Invention);
B60S1/00 (Core/Invention)
International (IPC 1-7): B60S1/64



Family:

Publication number	Publication date	Application number	Application date
CN2118671 U	19921014	CN19912026520U	19911011

Priority:
CN19912026520U 19911011

Probable Assignee: ZHENLONG AUTOMATIC FITTING FAC
Assignee(s): (std): ZHENLONG AUTOMATIC FITTING FAC ; ZHENLONG AUTOMATIC FITTING FACTORY ZENGCHENG TOWN
Assignee(s): ZHENLONG AUTOMATIC FITTING FACTORY ZENGCHENG TOWN GUANGZHOU
Inventor(s): (std): SHUI SHENG ZHU ; ZHU SHUI SHENG

Title: Large-scale cleaning vehicle

Abstract: Source: US5987699A A large-scale cleaning vehicle, for operation with a forklift, includes rotation brushes for sweeping debris toward a center of said cleaning vehicle, a sweeping brush for sweeping the debris into a debris collection box and a fan for pulling said debris into said debris collection box without the need for a motor in the cleaning vehicle. Each of the rotation brushes, the sweeping brush, and the fan are rotatably connected to a rear wheel of the cleaning vehicle such that when the cleaning vehicle is moved, the brushes and fan are rotated. The cleaning vehicle further includes a vertical adjustment for the rotation brushes to lift them when they are not needed, a lateral adjustment for the rotation brushes to adjust a width of sweeping, an audible warning for pedestrians, a water sprinkler **system** to aid in the cleaning process, and a large-scale trash removal brush mounted in front of the cleaning vehicle to push large-scale trash.

Classifications:

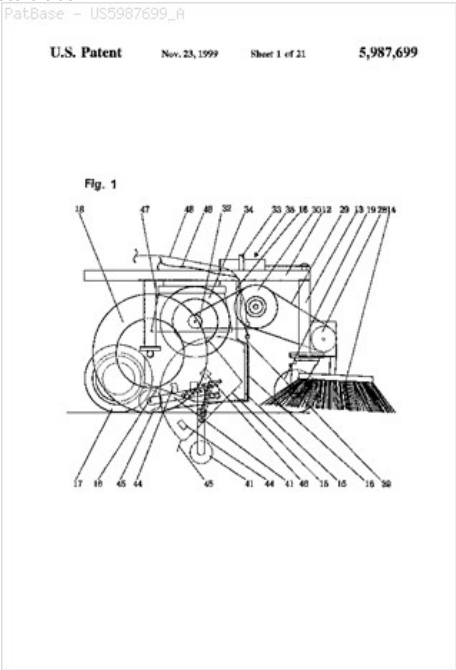
International (IPC 8-9): A47L11/16 A47L11/28 A47L11/282 A63F3/08 A63F5/00 B08B1/04 B60B33/06 B65F7/00 B66C1/34 E01H1/00 E01H1/02 E01H1/04 E01H1/05 E01H1/08 E01H3/02 G07C15/00 (Advanced/Invention); B08B1/04 E01H1/00 (Advanced/Non-invention); B08B1/04 B60B33/04 B65F7/00 B66C1/22 E01H1/00 E01H3/00 (Core/Invention); B08B1/04 (Core/Non-invention)

International (IPC 1-7): A47L11/16 A47L11/282 A47L5/08 A63F3/08 A63F5/00 B08B1/04 B60B33/06 B65F7/00 B66C1/34 E01H1/00 E01H1/02 E01H1/04 E01H1/05 E01H1/08 E01H3/02 G07C15/00

CPC: E01H1/02 E01H1/047 E01H1/05 E01H1/0845

European: E01H1/02 E01H1/04D E01H1/05 E01H1/08C2B

US: 15/27 15/339 15/349 15/82 15/83



Family:

Publication number	Publication date	Application number	Application date
AU199745167 A1	19980702	AU19970045167	19971113
AU741959 B2	20011213	AU19970045167	19971113
CN1082482 C	20020410	CN19971008600	19971113
CN1186761 A	19980708	CN19971008600	19971113
CN1328441 C	20070725	CN20011033967	19971113
CN1380467 A	20021120	CN20011033967	19971113
DE69723614 D1	20030828	DE19976023614	19970514
DE69723614 T2	20040609	DE19976023614T	19970514
EP0807716 A2	19971119	EP19970107835	19970514
EP0807716 A3	19980429	EP19970107835	19970514
EP0807716 B1	20030723	EP19970107835	19970514
JP10046537 A2	19980217	JP19960206930	19960806
JP10060846 A2	19980303	JP19960222084	19960823
JP10179483 A2	19980707	JP19960349375	19961227
JP10258151 A2	19980929	JP19970067909	19970321
JP10266152 A2	19981006	JP19970067910	19970321
JP2764258 B2	19980611	JP19960138041	19960531
JP2824570 B2	19981111	JP19960118728	19960514
JP2881576 B2	19990412	JP19960222084	19960823
JP2995009 B2	19991227	JP19960349375	19961227
JP3657055 B2	20050608	JP19960118727	19960514
JP9301671 A2	19971125	JP19960118727	19960514
JP9302636 A2	19971125	JP19960118728	19960514
JP9316839 A2	19971209	JP19960138041	19960531
KR100212377 B1	19990802	KR19970018471	19970513
KR19970074603 A	19971210	KR19970018471	19970513
MY126355 A	20060929	MY19970005475	19971114
TH11109 B	20011016	TH19971004689	19971114
TH36363 A	19991217	TH19971004689	19971114
TW418273 B	20010111	TW19970105984	19970506
US5987699 A	19991123	US19970856458	19970514
US6230363 BA	20010515	US19990395949	19990914

Priority:

JP19960118727 19960514	JP19960118728 19960514	JP19960138041 19960531
JP19960206930 19960806	JP19970067909 19970321	JP19960222084 19960823
JP19960349375 19961227	JP19970067910 19970321	US19990395949 19990914
US19970856458 19970514		

Probable Assignee: SUIDEN CO LTD

Assignee(s): (std): MIZUNORI K K ; SUIDEN CO ; SUIDEN CO LTD ; SUIDEN KK ; TOYOFUKU YOSHIMI ; EAGLE CLAMP CO

Assignee(s): EAGLE KURANPU KK

Inventor(s): (std): KATSUTOSHI KAI YUZO NAKAMURA ; TSUYAMA HATSUO ; YUZO KAWAI ; KAI YUZO ; YUZO KAI ; KATSUTOSHI NAKAMURA ; TOYOFUKU YOSHIMI ; KAWAI JUZO ; NARAMURA KATSUTOSHI ; NAKAMURA KATSUTOSH ; NAKAMURA KATSUTOSHI ; KAWAI YUZO

Inventor(s): KAI YUZO NAKAMURA KATSUTOSHI

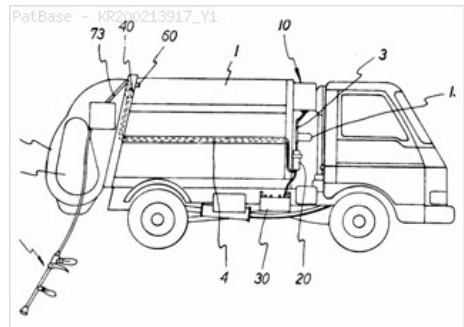
Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD

Designated states: BE CH DE FR GB IT LI NL

Title: The **garbage truck** which has all a sterilization processing unit (Machine translation)

Abstract: Source: KR200213917Y (Claim 1) 1. From there will be by a **garbage truck** which has all a sterilization/flesh insect **system** and, in compliance with each control valve it will be controlled after loading the chemicals tank undergarment drug, until end the piping pipe which it transports and the motor pump it will listen and the case which it has built-in loads in one side which it will be established on bottom of the chemicals tank and the minute description chemicals tank and, the minute description piping pipe it will be possible will burn once tightly and the neck it will sprout big and will be established and **spray system** will burn tightly freely to become accomplished, it is connected with the minute description motor pump and from the battery supplies all the member the application of power means for loads to pass by the lower part department, it loads the after grade support axis about under turning the batteryIt is connected, the minute description piping pipe the drug which comes out leading is controlled after loading, in compliance with the control means which in end one side is established the **garbage truck** which it does with feature.

Classifications:
International (IPC 8-9): B65F3/00 (Advanced/Non-invention)



Family:

Publication number	Publication date	Application number	Application date
KR200213917 Y1	20010215	KR20000022683U	20000809

Title: Garbage removal system (Machine translation)

Abstract: Source: RU36416U 1. The system of garbage removal, garbage barrel containing a bootable valves, baffle cleaning mechanism, including a brush-circular shower with cargo lift and rope vodozapornuyu fittings musoropriemnik, slide, characterized in that it is provided with a local fire fighting unit, placed in the slide, discharge unit comprising a tank, blower-blender to create water pressure and supply of disinfectant solution, with a high pressure hose and spray head and placed on the truck chassis, and musoropriemnik designed as a removable drive container placed under the barrel, garbage chute gate valve is designed as a and a horn, a blower-mixer is configured to regulate a concentration of disinfectant, the hoist is provided with a stop element freewheel and clamp the brush, the barrel is in the form of concrete masonry units.

Classifications:
International (IPC 8-9): E04F17/10 (Advanced/Invention);
E04F17/00 (Core/Invention)
International (IPC 1-7): E04F17/10

Family:

Publication number	Publication date	Application number	Application date
RU36416 U1	20040310	RU20030129397U	20031010

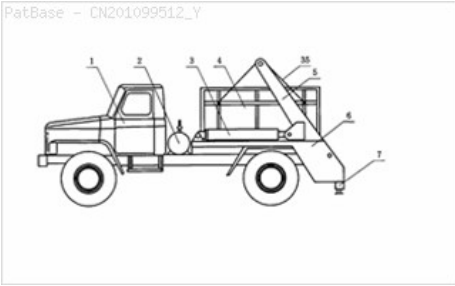
Priority:
RU20030129397U 20031010

Title: Rocker arm type refuse vehicle

Abstract: Source: CN201099512Y The utility model relates to a swing arm **garbage truck**, which comprises a control cabin, a gas storage bag and a chassis, wherein the chassis is mounted with a movable dustbin, a hydraulic hoisting self-unloading **system** and a hydraulic control **system**, the **truck** body is mounted with a **spray system**, the **spray system** comprises a drug tank provided with a gas inlet tube, a drug discharger, a drug inlet and a sewage outlet, and the gas inlet tube via a gas inlet valve is communicated with the gas storage bag. The swing arm **garbage truck** uses pneumatic fog **spray** technique and uses the vehicle gas source as power to convert the drug tank and the **sprayer** to **spray** water on the dustbin, prevent dust fly and disinfect the waste collecting site and **garbage** disposal plant. The hydraulic control **system** uses advanced three-way electromagnetic steering valve to replace traditional hand-operated steering valve to control liquid flow loop, thereby realizing automatic operation **system**, improving the working condition of driver and reducing labor strength, with simple and practical structure, easy production or modification and wide application.

Classifications:

International (IPC 8-9): B65F3/00 B65F3/02 (Advanced/Invention);
B65F3/00 B65F3/02 (Core/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN201099512 Y	20080813	CN200720091620U	20070824

Priority:

CN200720091620U 20070824

Probable Assignee: HENAN SHUNDA VEHICLE CO LTD

Assignee(s): (std): HENAN SHUNDA VEHICLE CO LTD

Assignee(s): HENAN SHUNDA VEHICLE CO

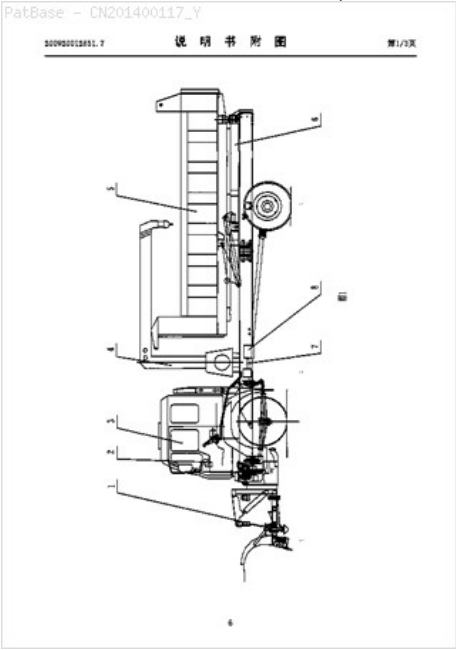
Inventor(s): (std): XIANCHENG MA

Inventor(s): MA XIANCHENG

Title: Multifunctional sanitation **truck**

Abstract: Source: CN201400117Y The utility model relates to a multifunctional sanitation **truck**, which comprises a **truck** body, a lifting mechanism, a hydraulic **system**, a transmission **system** and an electrical **system**. A secondary beam assembly is installed on the **truck** underframe of the **truck** body. The lifting mechanism is installed on the rear side of a cab. A **truck** carriage assembly is arranged behind the lifting mechanism. The transmission **system** is respectively connected with an electric control **system** and the hydraulic **system**. The utility model has the advantages that the Class II chassis is reconstructed in the chassis of the sanitation **truck**, the power comes from the motive power of the **truck**, the cost is low, the **truck** is multifunctional, the **truck** can be widely used by the sanitation department and the garden department for the **garbage** transfer, the greening **spray**, the snow removal in winter, the obstacle clearance and other operations, the labor strength is effectively reduced, the occupied area of special **trucks** is reduced and the utilization ratio of the sanitation **truck** is improved.

Classifications:
International (IPC 8-9): B60P1/54 B60P3/00 B65F3/00 E01H3/02 E01H5/06 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN201400117 Y	20100210	CN200920012651U	20090401

Priority:
CN200920012651U 20090401

Probable Assignee: ANSHAN HENGYE SPECIAL VEHICLE MFG CO LTD

Assignee(s): (std): ANSHAN HENGYE SPECIAL VEHICLE MFG CO LTD

Assignee(s): ANSHAN HENGYE SPECIAL VEHICLE MANUFACTURING CO

Inventor(s): (std): PENG GAO

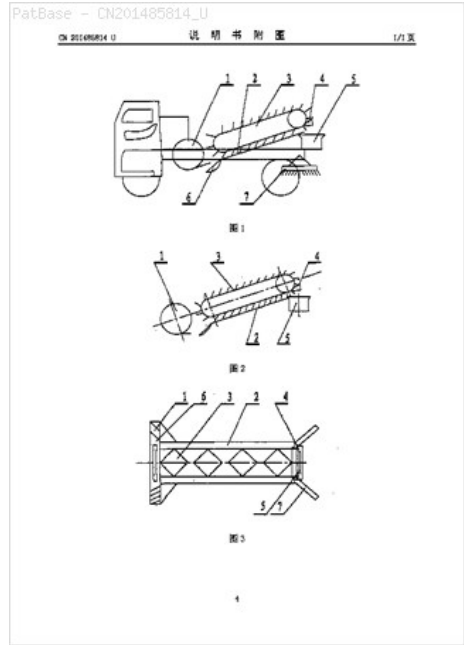
Inventor(s): GAO PENG

Title: Self-propelled sand beach cleaning and disinfecting vehicle

Abstract: Source: CN201485814U The utility model discloses a self-propelled sand beach cleaning and disinfecting vehicle which is drawn by a micro-**truck**, a hydraulic driving **system** is arranged on the vehicle, and the self-propelled sand beach cleaning and disinfecting vehicle is characterized in that a sand collector, a sieve body, a sand scraping conveyor belt, a medicine **spraying** device and a **garbage** collecting box are arranged on a vehicle body, and a sand guide plate and a sand leveling device are arranged below the vehicle body; and the height of the positions of the sand collector, the sand guide plate and the sand leveling device can be adjusted, and the three components are manipulated by the hydraulic driving **system** arranged on the vehicle body. The self-propelled sand beach cleaning and disinfecting vehicle can clean up and disinfect sand beach **garbage**, comb and level sand beach, protect the environment, and is conducive to physical health of travelers; the self-propelled sand beach cleaning and disinfecting vehicle is drawn by a motor vehicle, thereby having high mechanization degree, low labor intensity of workers, fast sand cleaning speed, high working efficiency and good using effect; and the self-propelled sand beach cleaning and disinfecting vehicle can be also used as a beach rescue vehicle through slight modification.

Classifications:

International (IPC 8-9): E01H12/00 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN201485814 U	20100526	CN200920093083U	20090302

Priority:

CN200920093083U 20090302

Probable Assignee: JILIN GREAT WALL MACHINE MANUFACTURE CO LTD

Assignee(s): (std): JILIN GREAT WALL MACHINE MANUFACTURE CO LTD

Assignee(s): JILIN GREAT WALL MACHINE MANUFACTURE CO

Inventor(s): (std): JIANJUN FAN ; JIANWU FAN ; JIAYU FAN ; FUJI DONG ; HONGJI YU ; NAIJIE YANG ; NAISHUO HU ; SHEN WANG ; YANMEI LI ; YUJIAO SONG ; ZHENGLU PEI

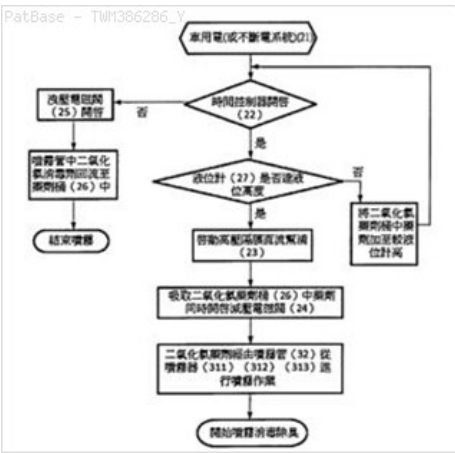
Inventor(s): YU HONGJI ; SONG YUJIAO ; WANG SHEN ; YANG NAIJIE ; PEI ZHENGLU ; HU NAISHUO ; LI YANMEI ; DONG FUJI ; FAN JIANJUN ; FAN JIANWU ; FAN JIAYU

Title: ON-BOARD DISINFECTION AND DEODORANT SPRAY SYSTEM FOR GARBAGE TRUCK

Abstract: Source: TWM386286Y

Machine translation: This creation is one kind may install in the garbage truck or other must disinfect with the vehicle deodorizes the motion carrier, mainly includes on the carrier to place one kind of spray system, carries on using the chlorine dioxide atomization disinfection deodorizer deodorizes the sterilization, achieved the chassis or other easy to send out the flavor material in ship trash to be able to reduce the chassis goes along the street when unusual smell of the sending out, benefits promotion in the environmental sanitation demand.

Classifications:
International (IPC 8-9): B65F7/00 (Advanced/Invention);
B65F7/00 (Core/Non-invention)



Family:

Publication number	Publication date	Application number	Application date
TWM386286 Y	20100811	TW20090218410U	20091006

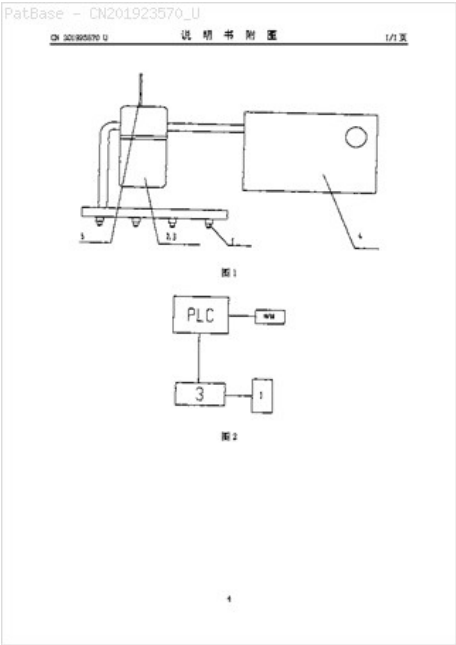
Priority:
TW20090218410U 20091006

Probable Assignee: CHANG HSIN HANTW
Assignee(s): (std): CHANG HSIN HAN ; HU WEN FAN ; HUANG CORY
Assignee(s): CHANG HSIN HANTW
Inventor(s): (std): CHANG HSIN HAN ; HU WEN FAN ; HUANG CORY

Title: Intelligent **spraying** and deodorizing device of **garbage truck**

Abstract: Source: CN201923570U The utility model relates to an intelligent **spraying** and deodorizing device of a **garbage truck**, comprising a group of **spraying** heads arranged at the position of a **garbage** inlet at the rear part of the **garbage truck**; the **spraying** heads are connected with a liquid medicine box through a water pump driven by a motor, the water pump is connected with an electrical control **system** controlled by PLC (programmable logic controller); the intelligent **spraying** and deodorizing device of the **garbage truck** has the characteristics of simplicity in structure and convenience in use and installation, and can effectively reduce secondary pollution caused by dust evolution and peculiar smell emission of the **garbage**.

Classifications:
International (IPC 8-9): B65F3/00 B65F7/00 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN201923570 U	20110810	CN201020682648U	20101215

Priority:
CN201020682648U 20101215

Probable Assignee: METONG HEAVY MACHINE CO LTD
Assignee(s): (std): METONG HEAVY MACHINE CO LTD
Assignee(s): METONG HEAVY MACHINE CO
Inventor(s): (std): XIAOJUN CHOU ; XIAOLIN JIAN
Inventor(s): CHOU XIAOJUN ; JIAN XIAOLIN

Title: FOREST FIRE TRUCK MULTI-FUNCTION (Machine translation)

Abstract: Source: VN9940A

Machine translation: Invention refers to forest fire fighting vehicles including multi-car base (6) have more axles, with very high and beyond the forest can not move the system of felling trees and cutting shrubs (1) inserted in the base car (6) with bearings (5) to make way for vehicle movement; grass garbage cleaning system (12) generated tape insulation isolate localized fires, cleaning systems lawn waste (12) is associated with base frame (6) by coupling (45), and be raised and lowered by hydraulic cylinders (9), fire extinguishing systems consist of a joint land cut with container land, land division and draw soil injection parts, spray on the fire ground.

Classifications:
International (IPC 8-9): A01B7/00 A62C27/00 A62C3/02 A62C39/00 (Advanced/Invention)
International (IPC 1-7): A01B7/00 A62C27/00 A62C3/02 A62C39/00

Family:

Publication number	Publication date	Application number	Application date
VN9940 A3	20120125	VN20100001582	20100621

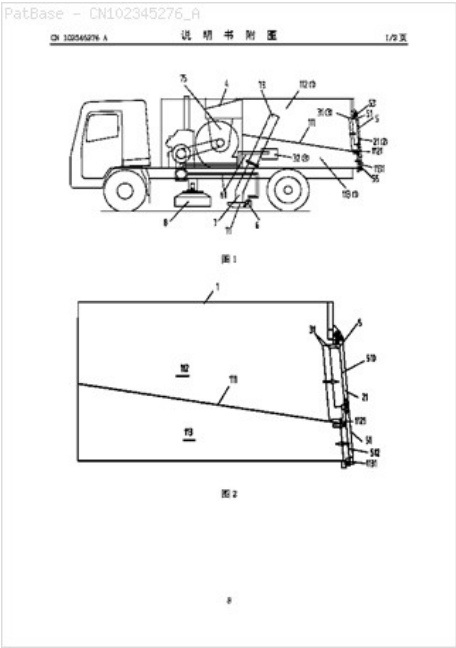
Priority:
VN20100001582 20100621

Title: **GARBAGE** BIN FOR CLEANING VEHICLE

Abstract: Source: CN102345276A The invention discloses a **garbage** bin for a cleaning vehicle. The **garbage** bin comprises a bin body and a bin door, wherein the bin body is divided into a first area and two second areas; the first area has an opening; the two second areas are closed and are symmetrically distributed on two opposite sides of the first area; the first area is used for storing **garbage** and sewage; the second areas are used for storing clean water; and the bin door is in hinged connection with the bin body and is used for sealing the opening. The bin body of the **garbage** bin is divided into a plurality of mutually separated areas, and different articles, such as sewage, purifying water, clean water, and the like, can be stored in the areas for being adapted to different working conditions, so that the **garbage** bin provided by the invention is reasonable in design and can promote the use effect of the cleaning vehicle.

Classifications:

International (IPC 8-9): B01D29/03 B01D29/50 B01D35/02 B01D36/02 B65F1/14 E01H1/00 E01H1/08 E01H1/10 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN102345276 A	20120208	CN201110296492	20110930
CN102345276 B	20130814	CN201110296492	20110930
CN102418322 A	20120418	CN201110301193	20110930
CN102418322 B	20130417	CN201110301193	20110930
CN102505654 A	20120620	CN201110299300	20110930
CN102505654 B	20140604	CN201110299300	20110930
CN102505656 A	20120620	CN201110296433	20110930
CN102505656 B	20141224	CN201110296433	20110930
CN102505657 A	20120620	CN201110299402	20110930
CN102505657 B	20140917	CN201110299402	20110930
CN202227297 U	20120523	CN201120378362U	20110930
CN202227307 U	20120523	CN201120378361U	20110930
CN202244958 U	20120530	CN201120378199U	20110930
CN202247764 U	20120530	CN201120374575U	20110930

Priority:

CN201120114917U	20110419	CN201110097594	20110419	CN201110296492	20110930
CN201110301193	20110930	CN201120378362U	20110930	CN201120378361U	20110930
CN201120374575U	20110930	CN201120378199U	20110930	CN201110299300	20110930
CN201110296433	20110930	CN201110299402	20110930		

Probable Assignee: ZOOMLION HEAVY IND SCI AND TECH

Assignee(s): (std): CHANGSHA ZOOMLION ENVIRONMENTAL AND SANITATION MACHINERY CO LTD ; ZOOMLION HEAVY IND SCI AND TECH ; ZOOMLION HEAVY IND SCIENCE AND TECHNOLOGY DEVELOPMENT CO LTD ; ZOOMLION HEAVY INDUSTRY SCIENCES AND TECHNOLOGY DEV CO LTD

Assignee(s): ZOOMLION HEAVY INDUSTRY SCIENCES AND TECHNOLOGY DEVELOPMENT CO ; ZOOMLION HEAVY INDUSTRY SCIENCE and TECHNOLOGY DEVELOPMENT CO LTD ; ZOOMLION HEAVY IND SCIENCE AND TECHNOLOGY DEVELOPMENT CO

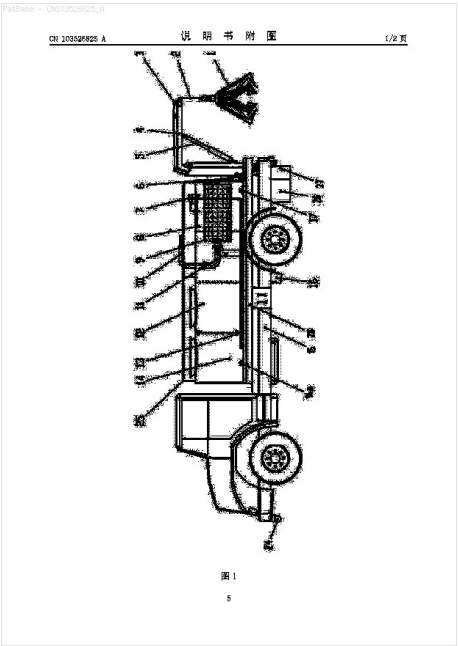
Inventor(s): (std): CHEN FAN ; FAN CHEN ; JIANHUA LI ; LI JIANHUA ; QINGLIN XIAO ; XIAO QINGLIN ; XIE YONGZHOU ; XINGMING ZHANG ; YONGZHOU XIE ; ZHANG XINGMING

Title: NOVEL FECES SUCTION TRUCK

Abstract: Source: CN103526825A The invention provides a novel fences suction truck which is characterized in that a self-discharging bottom plate on an automotive chassis ascends or descends through a hydraulic lifting mechanism and is provided with a fresh water bin and a waste water bin, the automotive chassis is provided with a vacuum pump system which is connected with the waste water bin, and a dehydration roller is arranged in the waste water bin to achieve solid-liquid separation; the automotive chassis is provided with a fire water pump and a reel water pipe device; the waste water bin is provided with a blowdown valve and a spray device, and the spray device is connected with the fresh water bin; a hydraulic capstan structure is arranged at the tail end of the self-discharging bottom plate, and a steel wire rope of the self-discharging bottom plate is connected with a hydraulic grab; a sprinkler head is arranged at the front end of the automotive chassis and connected with the fresh water bin through a pipeline. The novel fences suction truck is mainly suitable for suction of fences, achieves solid-liquid separation of feculence, is convenient to dredge and spray, and facilitates garbage clear operation in a pool underground. The novel fences suction truck integrates multiple functions and is suitable for environmental sanitation, large, medium-sized and small industrial and mining enterprises, communities, schools and agriculture cultivation and breeding in urban and rural areas.

Classifications:

International (IPC 8-9): E03F7/10 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN103526825 A	20140122	CN201310464983	20131009

Priority:
CN201310464983 20131009

Probable Assignee: LI WENFEI

Assignee(s): (std): LI WENFEI

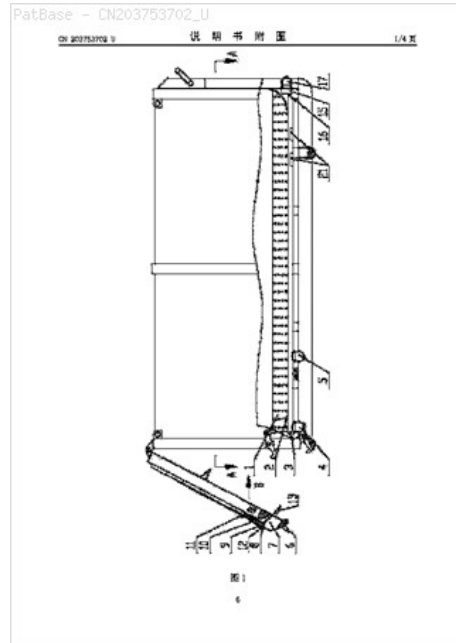
Inventor(s): (std): LI WENFEI

Title: **GARBAGE** CONTAINER SEWAGE FILTRATION STORAGE LEAKAGE PREVENTING DEVICE

Abstract: Source: CN203753702U The utility model relates to a **garbage** container sewage filtration storage leakage preventing device. The **garbage** container sewage filtration storage leakage preventing device comprises a main body, wherein the main body is a **garbage** container, a sewage storage tank with a sewage storage tank upper wall is arranged in the **garbage** container, a filtration hole is formed in the sewage storage tank upper wall, intervals are left among two sides of the sewage storage tank and two side walls of the **garbage** container, filtration arc plates are arranged above the intervals, water discharge valve mouths communicated with the intervals are formed in the two side walls of the **garbage** container, sewage storage tank water discharge valve mouths communicated with the sewage storage tank are formed in the **garbage** container, a through hole **system** is arranged on the front side wall of the **garbage** container, and a front side water inlet is formed in the front end of a bottom plate of the **garbage** container. According to the **garbage** container sewage filtration storage leakage preventing device, no sewage can be generated, and then no sewage can be dripped, **sprayed** or leaked to the ground during the butting transshipment process of the **garbage** container and a transport **truck** after the **garbage** container is filled with **garbage** due to the sewage storage tank arranged at the bottom of the **garbage** container and a back door water collecting tank arranged on the lower portion of a back door of the body of the **garbage** container, and simultaneously a cleaning **system** arranged on the front side of the body of the **garbage** container facilitates cleaning of the sewage storage tank and does not cause blocking.

Classifications:

International (IPC 8-9): B65D90/00 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN203753702 U	20140806	CN201420156646U	20140402

Priority:

CN201420156646U 20140402

Probable Assignee: FUJIAN HIYAT VEHICLE IND CO LTD

Assignee(s): (std): FUJIAN HIYAT VEHICLE IND CO LTD

Assignee(s): VIETNAM AUTOMOBILE IND CO LTD FUJIAN SEA ; FUJIAN HIYAT VEHICLE IND CO

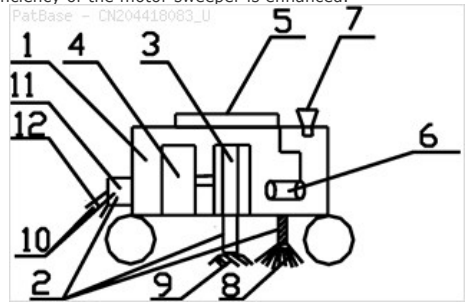
Inventor(s): (std): LIN TING ; LIU SHIMING ; WU QIPING ; WU ZHIJIE ; XIE ZUQIANG

Title: NOVEL SOLAR MOTOR SWEEPER

Abstract: Source: CN204418083U The utility model relates to a novel solar motor sweeper. The novel solar motor sweeper is characterized by comprising a truck body, a cleaning device, a garbage sorting device, a garbage incinerator, a solar silicon crystal plate, an electrical storage device and a public-address system; the solar silicon crystal plate is arranged on the top of the truck body; the electrical storage device, the garbage sorting device and the garbage incinerator are arranged in the truck body; the cleaning device is connected with the truck body; the public-address system is arranged on the surface of the truck body and is connected with the electrical storage device; the cleaning device comprises a broom, a dust collecting device and a water spraying device; the broom and the dust collecting device are connected with the bottom of the truck body; the water spraying device is connected with the tail of the truck body. With solar energy as the solar driving energy source of the novel solar motor sweeper, the increasingly tensioned energy source problem is relieved, the garbage can be processed in time by the garbage sorting device and the garbage incinerating device, and the service efficiency of the motor sweeper is enhanced.

Classifications:

International (IPC 8-9): E01H1/08 E01H3/02 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN204418083 U	20150624	CN201420739956U	20141201

Priority:

CN201420739956U 20141201

Probable Assignee: CUI LINHAO

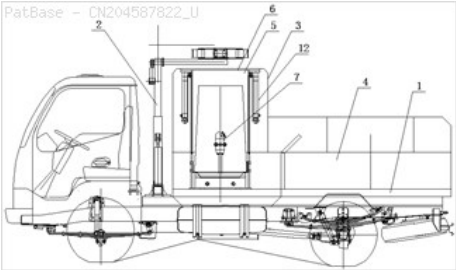
Assignee(s): (std): CUI LINHAO

Inventor(s): (std): CUI LINHAO

Title: ROADSIDE **GARBAGE** BIN SELF-CLEANING CAR

Abstract: Source: CN204587822U Roadside **garbage** bin self-cleaning car relates to a sanitation equipment, including vehicle chassis, the last **garbage** bin that sets up of vehicle chassis picks the manipulator, rinses storehouse, water storage box, and the upper end of rinsing the storehouse sets up hatch opening and cang gai, sets up in rinsing the storehouse and **sprays** the mechanism, **sprays** the mechanism and passes through the pipe connection water storage box, the bung leading **truck** is connected on upper portion in wasing the storehouse, sets up vertical layout's guide pillar in wasing the storehouse, sets up lifting tray on the guide pillar, and lifting tray connects elevating **system**. The utility model discloses to collect, that the collection is washd in return, roadside is as an organic whole, can not cause on-the-spot resoiling, thoroughly improve sanitationman's working condition, the effective water economy resource and the energy improve work efficiency and cleaning quality, reduce the washing cost of roadside **garbage** bin.

Classifications:
International (IPC 8-9): B65F3/04 B65F7/00 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN204587822 U	20150826	CN201520248576U	20150423

Priority:

CN201520248576U 20150423

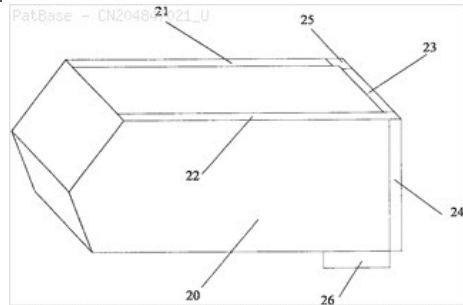
Probable Assignee: YANGZHOU HENGSHENG NVSHEN VEHICLES CO LTD
Assignee(s): (std): YANGZHOU HENGSHENG NVSHEN VEHICLES CO LTD
Assignee(s): VEHICLES CO LTD YANGZHOU NEW STAR GODDESS ; YANGZHOU HENGSHENG NVSHEN VEHICLES CO
Inventor(s): (std): CHEN JIATANG ; CHEN XIAOXU ; XU CANFENG

Title: **GARBAGE TRUCK** AFTERTREATMENT MECHANISM

Abstract: Source: CN204847021U The utility model discloses a **garbage truck** aftertreatment mechanism, include: the apex angle was adorned respectively about **garbage truck** carriage top first **spray** tube and second **spray** tube to and the third **spray** tube of transversely installing in the carriage, first **spray** tube is in the same place through 90 degrees first corner joint with the third **spray** tube, second **spray** tube, third **spray** tube pass through the one end of a tee junction water pipe, the other end of water pipe passes through 90 degrees second corner joint in the adjustable booster pump of carriage bottom, adjustable booster pump connects out a first pipeline to the carriage outside again, be equipped with the valve on the pipeline, the valve still is connected with a second pipeline, connects one and be used for the buckle be connected with the cleaning **system** at rubbish station on the second pipeline. The utility model has the advantages that: direct connect the **spray** tube running water or fire water of going up the rubbish station after, open valve booster pump and alright work, hard shortcoming when not only having overcome the labour cost, convenient to use can increase life moreover.

Classifications:

International (IPC 8-9): B65F7/00 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN204847021 U	20151209	CN201520593654U	20150810

Priority:

CN201520593654U 20150810

Probable Assignee: XU XIAOMING

Assignee(s): (std): XU XIAOMING

Assignee(s): XU XIAO MING

Inventor(s): (std): JIN HAI ; XU XIAOMING