

# Búsqueda Retrospectiva

N/Ref.:

## Título

**Recogedor doméstico de polvo con base articulada retráctil operable manualmente mediante accionamiento de mando remoto situado junto al asidero**

## Realizado para

## Número de referencias

17

## Fecha

18 de abril de 2016

# sumario

Estrategia de búsqueda  
Listados de referencias

Elaborado por:

Técnico superior examinador de patentes



# Estrategia de búsqueda

## BASE DE DATOS UTILIZADA:

**WPI**

**Productor:** Thomson-Reuters

**Contenido:** Datos bibliográficos de solicitudes publicadas y patentes concedidas por 40 oficinas de patentes desde 1963 hasta la fecha, además de patentes europeas y PCT, desde 1981.

**Actualización:** Semanal

Los títulos y los resúmenes de las referencias bibliográficas de WPI son elaborados por el productor de la base de datos. Este es el motivo por el que las referencias se incorporan a la base de datos con posterioridad a la fecha de publicación de las mismas. [Más información](#)

## **CÓDIGOS DE LA BASE DE DATOS WPI**

AB Resumen

ICAI Clasificación Internacional de Patentes

PA Solicitante

PN Número de publicación, fecha de publicación, semana  
de publicación Derwent

TI Título

## CLASIFICACIONES Y PALABRAS CLAVE EMPLEADAS EN LA BÚSQUEDA

Códigos de la CIP empleados

[A47L 13/52](#)

Palabras clave

Collapsible, foldable, pan, tray, debris, garbage, trash, dust, waste, dirt, scoop, shovel, refuse, latch, lock, dump, remote, así como posibles combinaciones booleanas y truncamientos.

## OBSERVACIONES

Esta búsqueda se ha realizado en la base de datos WPI. Esta base de datos puede no contener referencias relativas a documentos de patentes recientemente publicados ya que en la misma se incluyen las referencias una vez reelaborados los títulos y resúmenes por el productor. De los resultados obtenidos de acuerdo con la estrategia empleada sólo se han eliminado los que no están claramente relacionados con el tema, en función exclusivamente de su título y resumen. Si se requiere una búsqueda más exhaustiva llevada a cabo en bases de datos de patentes con mayor cobertura temporal y un análisis de los documentos recuperados, se aconseja solicitar un Informe Tecnológico de Patentes.

Las referencias bibliográficas recuperadas incluyen un hipervínculo a la base de datos Espacenet que permite recuperar el documento completo así como más información sobre el mismo.

La presente Búsqueda se ha realizado con el máximo rigor, de acuerdo con una metodología consolidada y tratando de ceñirse estrechamente a las necesidades del cliente. Esta Búsqueda no vincula a la OEPN en lo que se refiere a los resultados que puedan obtenerse de una subsiguiente solicitud formal de registro en alguna de las modalidades de propiedad industrial.

## OTROS SERVICIOS DOCUMENTALES

**Informes Tecnológicos de Patentes:** análisis en profundidad de las patentes relacionadas con el tema solicitado. Se incluye un comentario, listados con las referencias recuperadas en bases de datos nacionales y extranjeras

**Informes de Vigilancia Tecnológica a medida:** búsquedas periódicas sobre un tema técnico concreto. La periodicidad la establece el cliente

**Búsquedas Retrospectivas en la base de datos de la OEPN "INVENES":** ofrece referencias de patentes y modelos de utilidad españoles desde 1968, así como de solicitudes de patente europea y PCT que designan España

# Listados de referencias

1/17 @ WPI / Thomson

PN [CN201361017Y](#) 2009-12-16 DW201008

TI Dustpan structure for cleaning ground, has rotary shaft horizontally arranged on upper side of rear plate, and bottom plate with short side whose length is smaller than diameter of opening of waste-paper basket

PA (UYEN ) UNIV SHANGHAI EAST CHINA NORMAL AFFILIAT

ICAI [A47L13/52](#);

AB - NOVELTY :

The structure has a bottom plate (2), a turnable rear plate (4) and transitional lateral plates (3) arranged at two sides of the structure, where the bottom plate is in acute-angle trapezium shape. A handle (1) is vertically arranged on the rear plate, and a dustpan includes a large opening, where transverse size of a rear part of the dustpan is small. Length of short side of the bottom plate is smaller than diameter of opening of a waste-paper basket. A rotary shaft (7) is horizontally arranged on an upper side of the rear plate.

- USE :

Dustpan structure for cleaning ground.

- ADVANTAGE :

The structure is simple in structure, and completely improves functions of providing large dustpan inlet while cleaning the ground and smoothly dumping waste without leakage. The structure is conveniently utilized for damping waste.

- DESCRIPTION OF DRAWINGS :

The drawing shows a side partial sectional view of a dustpan structure.

1 : Handle

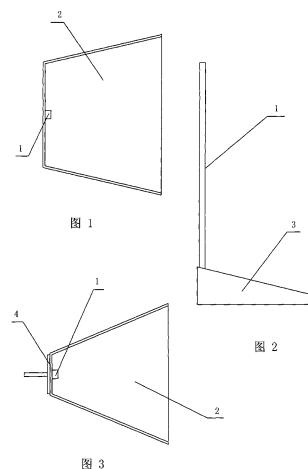
2 : Bottom plate

3 : Transition lateral plates

4 : Turnable rear plate

7 : Rotary shaft

20092008517.0 说明书附图 第1/3页



2/17 @ WPI / Thomson

PN [JP2009145334A](#) 2009-07-02 DW200946

[EP2077563A1](#) 2009-07-08 DW200946

[MX2008015494A1](#) 2009-07-31 DW201002

[TW200935448A](#) 2009-08-16 DW201008

[US2010135451A1](#) 2010-06-03 DW201037

[US8009790B2](#) 2011-08-30 DW201157

[EP2077563B1](#) 2011-09-07 DW201158

[US2011317798A1](#) 2011-12-29 DW201203

[US8265221B2](#) 2012-09-11 DW201260

[MX304590B](#) 2012-10-25 DW201307

[ES2370455T3](#) 2011-12-16 DW201322

[JP5603547B2](#) 2014-10-08 DW201466

[TWI453761B](#) 2014-09-21 DW201479

TI Debris trap for use in nuclear reactor has pivot actuator which swivels debris acquisition tray between insertion point and catching position

PA (JNFC ) GLOBAL NUCLEAR FUEL AMERICAS LLC(JNFC ) GLOBAL NUCLEAR  
FUEL-AMERICAS LLC(LATT-I) LATTER G M(SHEL-I) SHELTON S B  
ICAI [A47L13/52; B23P11/00; G21C19/00; G21C19/02; G21C19/20; G21C19/26; G21C19/32;](#)  
[G21C19/42;](#)

AB - NOVELTY :

The debris trap (10) has shaft (12) which contains pivot actuator (14). A debris acquisition tray (16) is attached to opposite end of shaft, and is provided with tray cavity (17) that has larger dimension than fuel bundle orifice. A pivot actuator which swivels debris acquisition tray between insertion point and catching position.

- DETAILED DESCRIPTION :

An INDEPENDENT CLAIM is also included for a method for inserting debris trap.

- USE :

Debris trap for use in nuclear reactor.

- ADVANTAGE :

Provides a debris trap that captures debris that passes the fuel bundle orifice in nuclear reactor.

- DESCRIPTION OF DRAWINGS :

The drawing shows the back perspective view of debris trap. (Drawing includes non-English language text).

10 : Debris trap

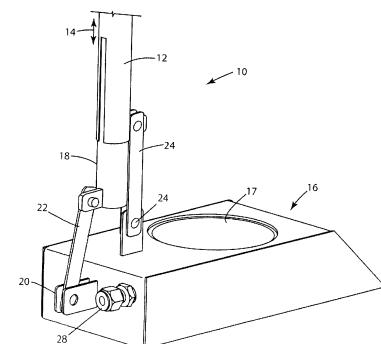
12 : Shaft

14 : Pivot actuator

16 : Debris acquisition tray

17 : Tray cavity

FIG.1



3/17 @ WPI / Thomson

PN [CN201256945Y](#) 2009-06-17 DW200945

TI Portable folding dustpan, has handle hinged behind dustpan body, and spherical groove formed behind dustpan body, where bottom part of handle is formed in shape of sphere and clamped in spherical groove

PA (JIAN-I) JIANG Z

ICAI [A47L13/52;](#)

## AB - NOVELTY :

The dustpan has a handle hinged behind a dustpan body. A spherical groove is formed behind the dustpan body, and a bottom part of the handle is formed in shape of sphere and clamped in the spherical groove. The handle is provided with an interference unit that fits with the spherical groove.

### - USE :

Portable folding dustpan.

## - ADVANTAGE :

The dustpan is reasonable in design, simple in structure, comfortable to utilize and convenient to carry and pack.

## - DESCRIPTION OF DRAWINGS :

**DESCRIPTION OF DRAWINGS:**

200820127889.X 说 明 书 附 图 第1/2

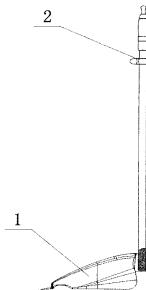


图 1

4/17 @ WPI / Thomson

PN JP4215217B1 2009-01-28 DW200920

JP2009285106A 2009-12-10 DW200981  
Dustpan for use with broom to dump e.g. refuse has operation body arms which are flexed in square C-shape, and can freely rotate while being pivotally supported on main body side by pivotable axial support unit.

BA body side by pivotal  
(SEND-I) SENDA X

ICAJ A47I 13/52

ICAI A47/L13/52,  
AB NOVELTY:

The dustpan has operation body arms (44,45) which are flex formed in square C-shape so that both sides of main body (1) can be straddled. The operation body arms are fixed by lower end of operation body operation rod (43). The operation body arms can freely rotate while being pivotally supported on main body side (12) by a pivotable axial support unit (42).

### - USE :

Dustpan for use with a broom to dump e.g. refuse.

### - ADVANTAGE :-

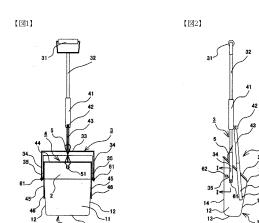
**ADVANTAGE :** Provides a hygienic dustpan which requires no contact of hands with main body. Vertically moves operation body holding unit to provide impact necessary for dropping contents caught inside a main body.

## - DESCRIPTION OF DRAWINGS :

The drawing shows a front view of the dust pan in lifted state.

- 1 : Main body
- 12 : Main body side
- 42 : Axial support unit
- 43 : Operation body operation rod
- 44,45 : Operation body arms

(6) ブリタニヤの手段を有するものと取扱う。



5/17 @ WPI / Thomson

PN [CN201108406Y](#) 2008-09-03 DW200867

TI Dustpan, has handle and dustpan body connected with each other, rotation positioning mechanism equipped between handle and dustpan body, and clip utilized for holding hand level sweeper

PA (GUAN-N) GUANGDONG MINGLANG LIFE ARTICLES MFR CO

ICAI [A47L13/52](#);

AB - NOVELTY :

The dustpan has a handle (2) and a dustpan body (1) connected with each other. A shaft hole is opened on the handle, and a hinge pin passes through the shaft hole to connect the handle with the dustpan body. A rotation positioning mechanism is equipped between the handle and the dustpan body. A clip (20) is utilized for holding a hand level sweeper is equipped on a hand level (15). Key-strokes and pin saddles are equipped on the handle by the rotation positioning mechanism and the key-strokes rotate around shaft on the handle.

- USE :

Dustpan.

- ADVANTAGE :

The dustpan structure is capable of rotating the dustpan body to vertical position, so as to save the placement space.

- DESCRIPTION OF DRAWINGS :

The drawing shows a side view of a dustpan.

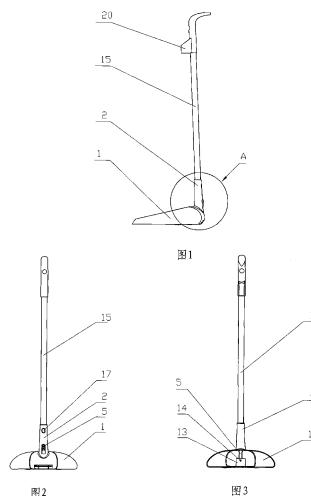
1 : Dustpan body

2 : Handle

15 : Handle

20 : Clip

200729058394.8 说明书附图 第1/3页



6/17 @ WPI / Thomson

PN [CN2915021Y](#) 2007-06-27 DW200852

TI Portable garbage cleaning storage device has case body, handle, sliding flip, connecting ring set on connecting-rod matches with connecting slot, fixing and movable cover plate, opening clamping slot, and broom

PA (ZHEN-I) ZHENG M

ICAI [A47L13/52; B65F1/00](#);

AB - NOVELTY :

The utility model claims a portable garbage cleaning storage device, comprising a case body 9, a handle 2 is connected on the case body, a sliding flip 4 is set on the case body, a pair of connecting-rod 6 is set on the sliding flip 4, another end of the connecting-rod 6 hinges with the case body, enabling the sliding flip sliding along the hinge joint as centre, and enclosing matched or opening matched with the opening of case body, a connecting slot 2a is set in the handle 2, a connecting ring 6b set on the connecting-rod matches with the connecting slot. A fixing cover plate 9a and a movable cover plate 9c hinged with it are set on the opening of the case body, a opening clamping slot 3 is set on the upper part of the handle 2, a broom 10 is clamp connected in the opening clamping slot. Due to adopting aforesaid technical case, the utility model not only can be used as a dustpan but also can be used as a dustbin when stands, it has advantages of multipurpose, good sealing property, beautiful and clean appearance, convenient use and the like.

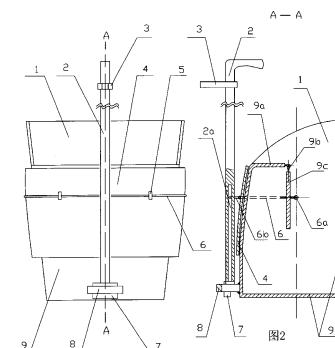


图1

6

7/17 @ WPI / Thomson

PN [CN101061938A](#) 2007-10-31 DW200821

TI Convenient dustpan, has bar whose one end is equipped with rotatable handle, dustpan head rotating around another end of dustpan bar, and steel wire whose two ends are respectively fixed on handle and dustpan head

PA (ZHAN-I) ZHANG Q

ICAI [A47L13/52](#);

AB - NOVELTY :

The dustpan has a bar (1) whose one end is equipped with a rotatable handle (2), a dustpan head (5) rotating around another end of the dustpan bar, and a steel wire (3) whose two ends are respectively fixed on the handle and the dustpan head. A pulley is placed on the dustpan bar.

- USE :

Convenient dustpan.

- ADVANTAGE :

The dustpan has simple structure, and is convenient to use.

- DESCRIPTION OF DRAWINGS :

The drawing shows a side view of a convenient dustpan.

1 : Dustpan bar

2 : Handle

3 : Steel wire

5 : Dustpan head

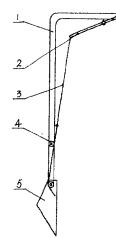


图 1

8/17 @ WPI / Thomson

PN [US2007163069A1](#) 2007-07-19 DW200751

TI Dustpan for picking up debris, has handle connected to dustpan receptacle by latching mechanism having latching interfaces, where latching interfaces of latching mechanism are connected to each other

PA (SAMP-I) SAMPAIO A

ICAI [A47L13/52](#);

AB - NOVELTY :

The dustpan has a latching mechanism (4) including an upper latching member (5) with a latching interface (9) and a lower latching member (6) with another latching interface. A handle (3) is connected to a dustpan receptacle (2) by the latching mechanism, where the handle is connected to the upper latching member and the lower latching member. The lower latching member is pivotally connected to and adapted to hook to the dustpan receptacle, where the latching interfaces are connected to each other.

- USE :

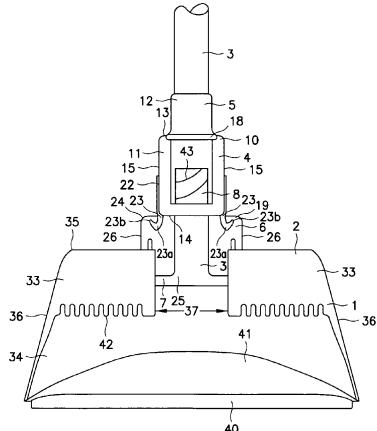
Used for picking up debris.

- ADVANTAGE :

The handle is connected to the dustpan receptacle by the latching mechanism, and the latching interfaces are connected to each other, thus enabling the dustpan receptacle to have a latched horizontal position for a waste pick up and an unlatched vertical position for a direct waste disposal into trashcans. The dustpan is less fatiguing to use, and easier to construct and repair.

- DESCRIPTION OF DRAWINGS :

The drawing shows a front elevational view of the dustpan in unlatched vertical position.



1 : Dustpan

2 : Dustpan receptacle

3 : Handle

4 : Latching mechanism

5 : Upper latching member

6 : Lower latching member

7 : Pivotal connection

8 : Lower end

9 : Latching interface

10 : Back surface

11 : Plate

9/17 @ WPI / Thomson

PN [US2003088938A1](#) 2003-05-15 DW200342[US6854155B2](#) 2005-02-15 DW200513

TI Lobby dustpan used when cleaning floor surface, has gripping member retained relative to elongated handle, and linearly moved and connected to one end of elongated manipulating rod to allow pivoting of receptacle on bail

PA (HERN-I) HERNDON G W

ICAI [A47L13/52](#);

AB - NOVELTY :

A gripping member, retained relative to an elongated handle (12), is linearly moved and connected to one end of an elongated manipulating rod (4) to allow pivoting of a receptacle (18) on a bail (16) between a resting position and a disposal position. The elongated manipulating rod is pivotally connected to a receptacle connector.

- USE :

Used when cleaning floor surface.

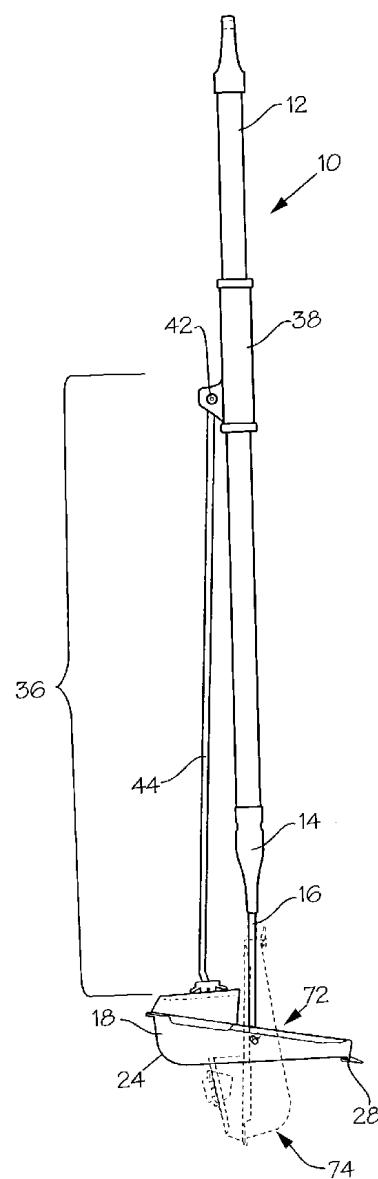
- ADVANTAGE :

Ensures convenient collection and disposal of rubbish. Simplifies utilization of lobby dustpan. Reduces number of components and manufacturing cost. Uses readily available material. Has remotely controlled tray.

- DESCRIPTION OF DRAWINGS :

The figure shows the side view of a lobby dustpan.

- 4 : Manipulating rod
- 12 : Elongated handle
- 16 : Bail
- 18 : Receptacle



10/17 @ WPI / Thomson

PN [US6315341B1](#) 2001-11-13 DW200245

TI Adjustable shovel has locking unit which selectively locks handle with respect to pivotable blade unit according to engagement of locking arm of pawl to teeth of gear provided to rod of blade unit

PA (LEON-I) LEON F(LEON-I) LEON S

ICAI [A01B1/22](#);

AB - NOVELTY :

A blade unit is rotatably attached to the lower end (13) of an elongated handle (12) through a rod such that the blade unit can be pivoted with respect to the handle lower end. A locking unit selectively locks the handle with respect to the blade unit according to the engagement of the locking arm (43) of a pawl (42) to the teeth (41) of a gear (40) attached to the rod of the blade unit.

- DETAILED DESCRIPTION :

The adjustable shovel device includes a rod extended from the back edge of the blade

unit for attachment to the lower end of the handle. Holes are formed in both protruding sides of the rod. Bores are formed in both protruding sections of the lower end of the handle. The rod is attached to the lower end of the handle through insertion of a bolt into the aligned apertures and bores of the rod and handle lower end, after which the front insertion end of the inserted bolt is matched with a nut. The lower end (52) of a pole (50), provided inside the handle, contacts to the other arm (44) of the pawl. The upper end (51) of the pole contacts and corresponds to a pushbutton (56) to enable the engagement and disengagement of the pawl to the gear.

### - USE ;

#### **Adjustable shovel device.**

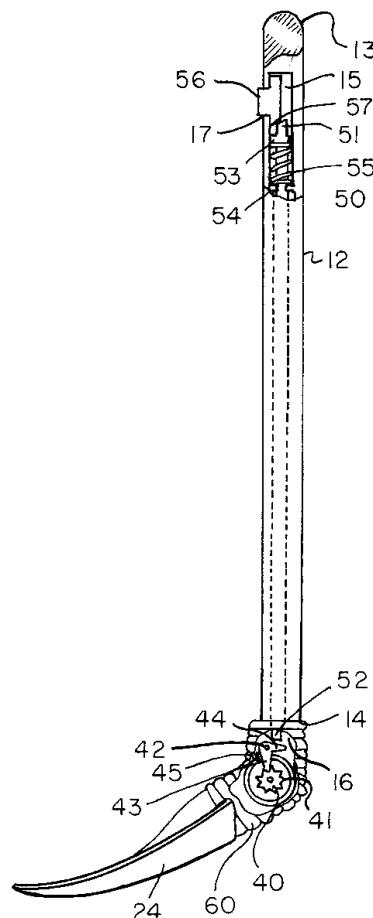
#### - ADVANTAGE :

Enables simple and efficient manufacture of adjustable shovel device with durable and reliable construction at low cost. Enables adjusting blade angle to change predetermined angle of blade unit with respect to handle

## - DESCRIPTION OF DRAWINGS -

The figure shows the schematic perspective view of adjustable shovel device.

- 12 : Handle
- 13 : Handle lower end
- 40 : Gear
- 41 : Teeth
- 42 : Pawl
- 43 : Locking arm
- 44 : Another pawl Arm
- 50 : Pole
- 51 : Pole upper end
- 52 : Pole lower end
- 56 : Pushbutton



11/17	@ WPI / Thomson
PN	<a href="#">JP2001275910A</a> 2001-10-09 DW200176
TI	Dustpan device used in collecting waste, has lid cord connected to stem portion to stop release edge side of lid in arbitrary position at top portion of dustpan box opening
PA	(SEGA-I) SEGAWA M
ICAI	<a href="#">A47L13/52</a> ;
AB	<p>- NOVELTY :</p> <p>The dustpan device has a lid (22) openably set at the top portion of the opening (14) of a dustpan box (13). A lid cord (12) is connected to the stem portion (5B) of the dustpan device to stop the release edge side of the lid in arbitrary positions.</p> <p>- DETAILED DESCRIPTION :</p> <p>The dustpan box is attached at the end of a forked arm. A dustpan box cord (11) is connected at the rear from the attachment of the dustpan box to the forked arm. A slide body, connected to the dustpan box cord, is arranged by the slide groove formed in the hollow stem portion of the dustpan device.</p> <p>- USE :</p> <p>Used in collecting waste without soiling hand, glove or clothes.</p> <p>- ADVANTAGE :</p>

Has dustpan box that can be rotated and washed without directly touching the dustpan box. Sanitary since dustpan device can be used without soiling hand, gloves or clothes of user.

- DESCRIPTION OF DRAWINGS :

The figure shows the side view of the dustpan device.

5B : Stem portion

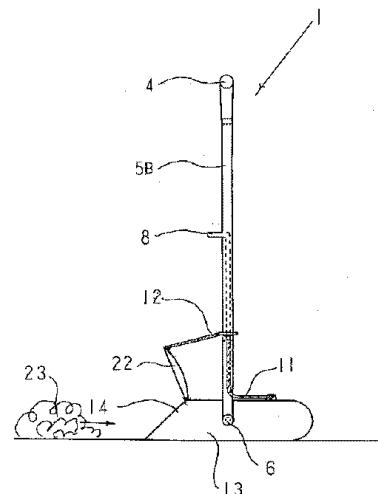
11 : Dustpan box cord

12 : Lid cord

13 : Dustpan box

14 : Opening

22 : Lid



12/17 @ WPI / Thomson

PN [US5548864A](#) 1996-08-27 DW199640

TI Tube and biassed drift pin and dust-pan - has leaf spring with base portion and cantilever portion for relative flexion in between

PA (QUIC-N) QUICKIE MFG CORP

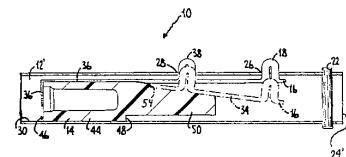
ICAI [A47L13/52; B25G1/04; B25G3/18; B25G3/38;](#)

AB The tube comprises a wall formed with two axially-spaced holes. A leaf spring has a base portion and a cantilever portion joined to the base portion for relative flexion between. The base portion is formed with an abutment surface and the cantilever portion is arranged to carry the drift pin as well as a spaced push pin. A separate cartridge is formed with an abutment surface. The leaf spring is disposed in the tube with the drift and push pins aligned to extend and retract through respective ones of the axially-spaced holes.

The cartridge is sized and shaped to permit sliding insertion in the tube relative to the leaf spring to a stationary position where the respective abutment surfaces are mated and the cartridge wedges the base portion of the leaf spring relatively immobile against the tube wall. The push and drift pins are normally biassed to extend through the respective holes and the push pin can be depressed to induce full retraction of the drift pin.

- ADVANTAGE :

No need for welds, adhesive or rivets.

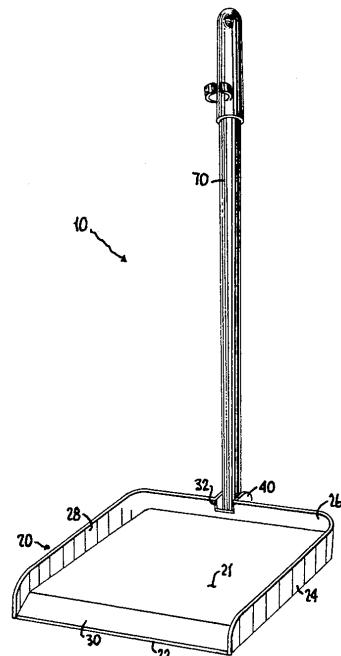


**AB** The dust pan assembly has a bracket coupled to the rear of the dust pan scoop for pivotally receiving an elongated handle, where the handle can pivot and lock between at least two positions. In a first position the handle and scoop are perpendicular, for gathering debris. In a second position the handle and scoop are parallel for shovel-like disposal of debris gathered and for optimal storage and display.

The dust pan assembly can have clamps on one or both of the handle and the bracket for receiving a broom, so that the dust pan assembly and the broom are attached as an integral unit.

- ADVANTAGE :

The scoop extends away from the handle in the parallel position, minimising the space occupied in storage or display.



14/17 @ WPI / Thomson

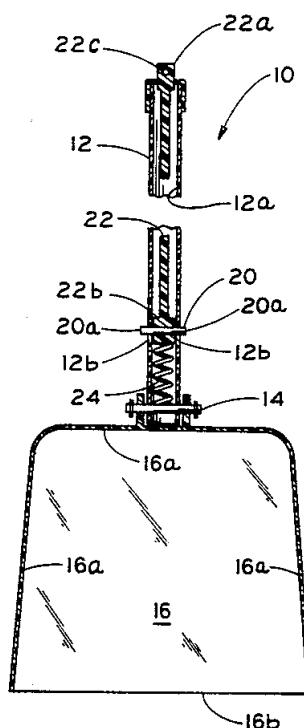
PN [US4584735A](#) 1986-04-29 DW198620

TI Dust-pan with control handle - has hollow handle with sliding rod actuating latch to hold pan in selected position

PA (LAMB-N) LAMBRO IND INC

ICAI [A47L13/52;](#)

**AB** The dustpan has a control handle and is pivotally connected adjacent a lower end of a control handle to have a first position extending laterally during use and a second position extending vertically to discharge the dustpan. The control handle has a hollow interior and slots on opposite sides adjacent the lower end. A control rod slides in a hollow handle. A latching pin has an operative position oriented laterally of and attached to the lower end of the control rod with opposite ends protruding from the slots of the control handle. A pin-engaging hook on the dustpan in the first laterally extending position of the dustpan latches about the protruding opposite ends of the latching pin. An upper end on the control rod protrudes from the control handle to be actuated through descending movement so that the descending movement to disengages the latching pin from the dustpan hook.



15/17 @ WPI / Thomson

PN [EP0156527A](#) 1985-10-02 DW198540  
[FI841689A](#) 1985-08-29 DW198551  
[US4562611A](#) 1986-01-07 DW198605  
[CA1210949A](#) 1986-01-09 DW198641

TI Automatic dumping dust pan - comprises lever adjacent operator's hand, to release pan-dumping detent

PA (MART-I) MARTTINEN A L

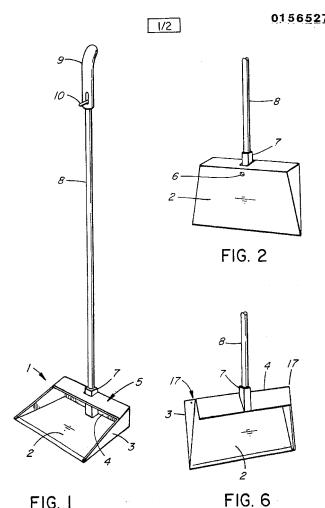
ICAI [A47L13/52;](#)

AB A dust pan (2) is pivotally mounted on an elongate handle, for movement between operative and dumping positions. A retainer at the lower handle end engages the pan in the operative position. An actuator lever (10) at the upper part of the handle is connected to the retainer, allowing dumping of the contents.

The handle can be hollow and include a grip at the top. The actuator on the grip can then be connected to the retainer by a cable or solid rod extending within the handle. The retainer can comprise a sprung sprung detente (15).

- USE :

Long handles dust pan for household cleaning.



16/17 @ WPI / Thomson

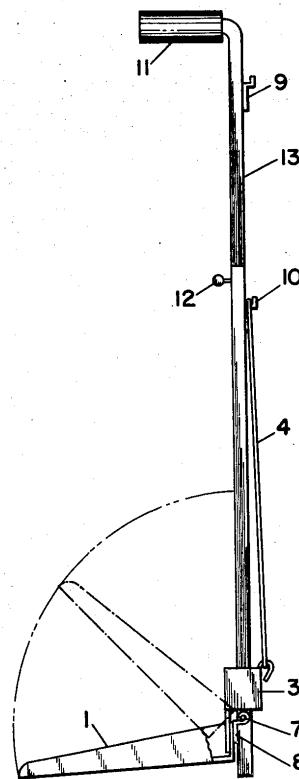
PN [US3971095A](#) 1976-07-27 DW197632

TI Collapsible dust pan assembly - has upright handle with remote control for pan manipulation

PA (FISH-I) FISH P R

ICAI [A47L13/52;](#)

AB The collapsible dust pan has an upright member with its upper end extending at 90 deg. with respect to said upright member. A pan is connected to the lower portion of the upright member through a hinge engaging the pan in a horizontal position by engaging the back of the pan. The pan folds up and leans against the upright member in a closed position, being retained by the rigid latch engaging the front edge of the pan. The pan opens to the horizontal position and is stopped by the hinge coming into contact with an extension of a lower portion of the upright member. The upright member contains a remotely operated control disposed near its top for controlling the rigid latch so that the pan can be released from its closed position and engaged in its open position without stooping.



17/17 @ EPODOC / EPO

PN JP2985078B1 1999-11-29

TI (A) DUSTPAN

PA (A) KAWASE TADAO; FUJIWARA HIROYUKI

AB (A)

(7) PROBLEM TO BE SOLVED: To provide an extremely sanitary dustpan by which dust can be collected and carried and further thrown away by shifting a grip of the dustpan from one hand to the other and there is no need to touch a box body. SOLUTION: A U-shaped forwardly supported rod 5 having a first gripping part 6, which rod 5 is pivotally supported at the forward part of a box body 1, with a dust collecting port 2, on the opposite sides thereof, is provided. And a U-shaped movable supporting rod 9 having a second gripping part 10, which rod 9 is engaged with the rear part of the body 1 so as to be movable and turnable, is provided. Both of the rod 5 and 9 are connected together so that the gripping part 6 is movably positioned below the gripping part 10.

