

PatBase - Search results 04 August 2018

Search query (15): fn=(56955452 or 56955452 or 13257121 or 13257121 or 30358208 or 31058653 or 31459233 or 32392584 or 31381858 or 32623178 or 31381858 or 31338970 or 34245545 or 34291865 or 44229947 or 46802275 or 51510198 or 8646876 or 12465712 or 10767606 or 11083223 or 18793241 or 14962214 or 28020680 or 30358208 or 31058653 or 32392584 or 41777861 or 34972535 or 44220043 or 44229947 or 51510198 or 62228874 or 49368227 or 14962214 or 19340906 or 18721114 or 19297491 or 21482574 or 22822661 or 22528219 or 913482 or 7505342 or 27432918 or 4834505 or 2869810 or 6508859 or 5078822 or 27079827)

Results: 40

Search history

Search PA=(GILBERTO ALDANA PARDO) (Results 1)

1:

Search fn=(70158175) (Results 1)

2:

Search pedal (Results 314477)

3:

Search bathroom (Results 98437)

4:

Search 3 and 4 (Results 578)

5:

Search cover (Results 1000000)

6:

Search 5 and 6 (Results 263)

7:

Search IC=(A47K) (Results 201872)

8:

Search 7 and 8 (Results 90)

9:

Search thread* and shaft (Results 854746)

10:

Search 9 and 10 (Results 9)

11:

Search fn=(32363372 or 30900880 or 42234055 or 48319523 or 5010160 or 5236560 or 3037282 or 11263868 or 11347223 or 15418850 or 44220043 or 48319523 or 24234529 or 18698750 or 20341126 or 22298957 or 21097349 or 23896348 or 841187) (Results 18)

Search fn=(899088 or 79472 or 1406607 or 12921012 or 11139334 or 24110505) (Results 6)

13:

Search PN=(US5327589) (Results 1)

14:

Search fn=(56955452 or 56955452 or 13257121 or 13257121 or 30358208 or 31058653 or 31459233 or 32392584 or 31381858 or 32623178 or 31381858 or 31338970 or 34245545 or 34291865 or 44229947 or 46802275 or 51510198 or 8646876 or 12465712 or 10767606 or 11083223 or 18793241 or 14962214 or 28020680 or 30358208 or 31058653 or 32392584 or 41777861 or 34972535 or 44220043 or 44229947 or 51510198 or 62228874 or 49368227 or 14962214 or 19340906 or 18721114 or 19297491 or 21482574 or 22822661 or 22528219 or 913482 or 7505342 or 27432918 or 4834505 or 2869810 or 6508859 or 5078822 or 27079827) (Results 40)

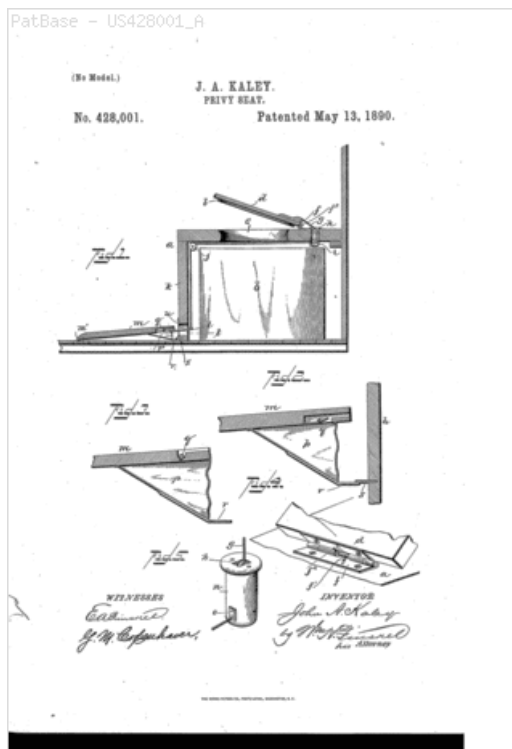
1) Family number: 27432918 (US428001 A)

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Classifications:

CPC: A47K13/10

US: 4/246.3 49/263



Family:

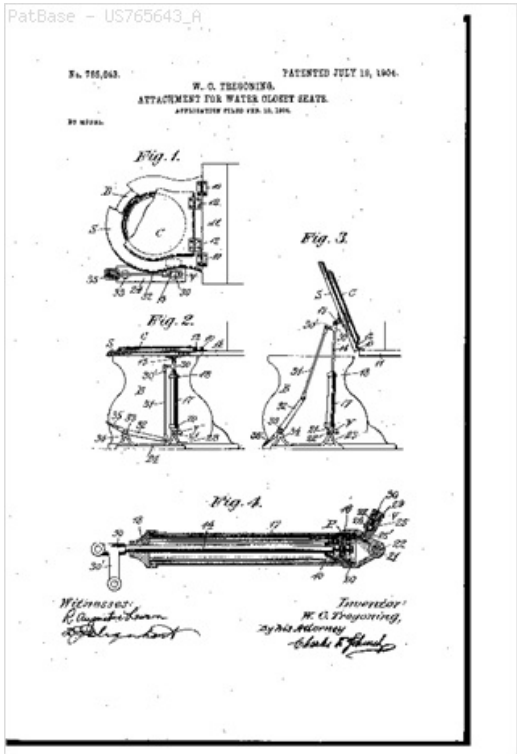
Publication number	Publication date	Application number	Application date
US428001 A	18900513		00000000

2) Family number: 27079827 (US765643A)

© PatBase

Title: ATTACHMENT FOR WATER-CLOSET SEATS.

Classifications:
CPC: Y10T16/286 A47K13/10
US: 16/70 4/246.4 4/248



Family:

Publication number	Publication date	Application number	Application date
US765643 A	19040719	US19040192933	19040210

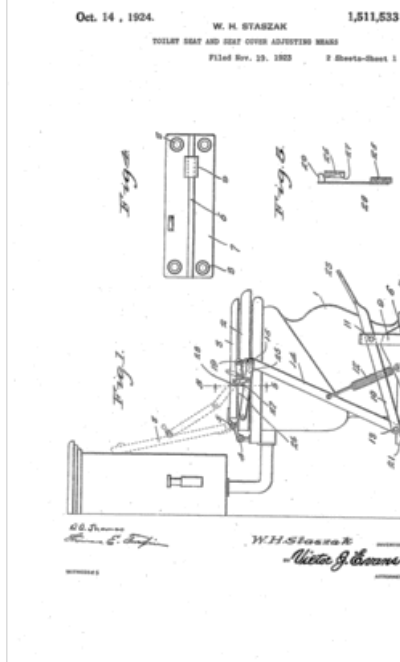
Priority:
US19040192933 19040210
Probable Assignee: TREGONING WILLIAM C
Assignee(s): (std): TREGONING WILLIAM C
Assignee(s): WILLIAM C TREGONING
Inventor(s): (std): TREGONING WILLIAM C
Inventor(s): WILLIAM C TREGONING

3) Family number: 18721114 (US1511533A)

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Title: TOILET SEAT AND SEAT-COVER ADJUSTING MEANS

Classifications:
International (IPC 8-9): A47K13/10 (Advanced/Invention);
A47K13/10 (Core/Invention)
International (IPC 1-7): A47K13/10
CPC: A47K13/10
European: A47K13/10
US: 4/246.1 4/246.5

**Family:**

Publication number	Publication date	Application number	Application date
US1511533 A	19241014	US19230675687	19231119

Priority:

US19230675687 19231119

Probable Assignee:

HENRY STASZAK WILLIAM

Assignee(s): (std):

HENRY STASZAK WILLIAM

Inventor(s): (std):

HENRY STASZAK WILLIAM

Inventor(s):

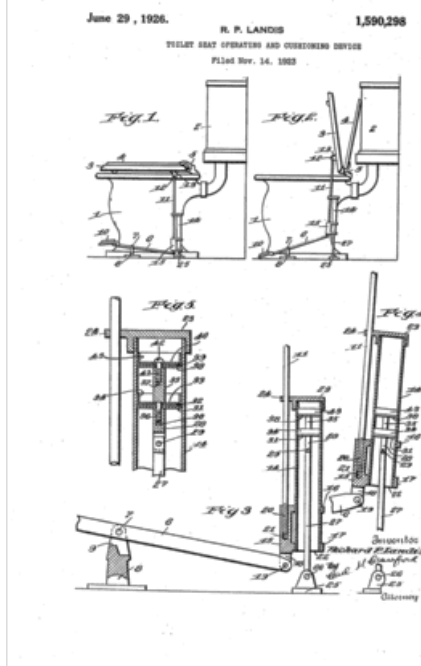
STASZAK WILLIAM HENRY

4) Family number: 19297491 (US1590298A)

© PatBase

Title: TOILET-SEAT OPERATING AND CUSHIONING DEVICE**Classifications:****International (IPC 8-9):** A47K13/10 (Advanced/Invention);

A47K13/10 (Core/Invention)

International (IPC 1-7): A47K13/10**CPC:** A47K13/10**European:** A47K13/10**US:** 4/246.5 4/249**Family:**

Publication number	Publication date	Application number	Application date
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Priority:

US19230674682 19231114

Probable Assignee:

LANDIS RICHARD P

Assignee(s): (std):

LANDIS RICHARD P

Inventor(s): (std):

LANDIS RICHARD P

5) Family number: 19340906 (DE485432A)

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Title: VORRICHTUNG ZUM BEDIENEN DER VERSCHLUSSKLAPPE IM BODEN VON DAEMPFERN, BESONDERS FUTTERMITTELDAMPFERN, DIE VON EINEM FUELLBODEN AUS BESCHICKT WERDEN DEVICE FOR OPERATING THE CLOSURE FLAP IN SOIL dampers, ESPECIALLY FUTTERMITTELDAMPFERN BY A fill soil AUS charged BE (Machine translation)

Abstract: Source: DE485432A [DE] (Claim 1) 1.PATENTANSPRUECHE: i. Vorrichtung zum Bedienen der Ver- schlussklappe im Boden von Daempfern, be sonders Futtermitteldampfiern, die von einem Fuellboden aus beschickt werden, da durch gekennzeichnet, dass der am unteren Feile des Daempfers angelenkte, die Ver- schlussklappe (a) tragende zweiarmige Schliesshebel (c, d) durch einen zweiten ueber den Fuellboden reichenden zwei armigen Hebel (f, g) so beeinflusst wird, dass dessen unterer Arm (f) in. der Schliess stellung die Klappe (a) kniebebelartig ver riegelt. Vorrichtung nach Anspruch i, da durch gekennzeichnet, dass am unteren.finde des unteren Armes t) des Hand hebels eine Lasche (l) angelenkt ist, die den freien Arm des Schliesshebels (d) um fasst, ihn bei der oeffnungsbewegung des Handhebels mitnimmt, in der Schliesslage aber in etwa senkrechter Stellung ver riegelt.. 3. Vorrichtung nach Anspruch i, da durch gekennzeichnet, dass die Klappe (a) mittels einer den Arm (c) des Schliess hebels durchsetzenden Stellschraube (e) befestigt ist.

Machine translation: (claim 1) 1.PATENTANSPRUECHE: i device to operate the Ver-closing flap in the bottom of dampers, be particularly Futtermitteldampfiern, which are fed from a fill soil, as characterized by that the file at the bottom of the damper hinged, the Ver-closing flap (a) carrying two-armed closing lever (c, d) by a second over the fill soil-ranging two-armed lever (f, g) is influenced such that the lower arm (f) in. the closing position, the flap (a) locked knee bebel like a Belle. Apparatus according to claim i, as characterized by, that is on the lower arm unteren.finde t) of the hand lever includes a tab (l articulated) to the free arm of the locking lever (d) is construed takes him at the opening movement of the hand lever, in the closed but locked in an approximately vertical position Ver.. Third Apparatus according to claim i, as characterized by, that the flap (a) is fastened by means of an arm (c) of the closing lever passing through screw (e).

Classifications:

International (IPC 8-9): A23N17/00 (Advanced/Invention);
A23N17/00 (Core/Invention)

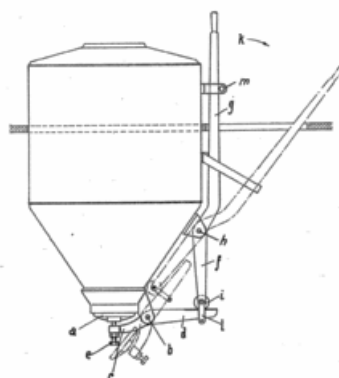
International (IPC 1-7): A23K3/02

CPC: A23N17/004

European: A23N17/00C

PatBase - DE485432_A

Zu der Patentschrift 485432
Kl. 89g Gr. 7

**Family:**

Publication number	Publication date	Application number	Application date
DE485432 A	19291104	DE1925W068725D	19250304

Priority:

DE1925W068725 19250304 DE1925W068725 19250304 DE1925W068725 19250304

Probable Assignee: WAGGON U MASCHB GOERLITZ AG

Assignee(s): (std): WAGGON U MASCHB GOERLITZ AG ; WAGGON UND MASCHB AG GOERLITZ

Assignee(s): WAGGON UND MASCHINENBAU AKT GES GOERLITZ ; WAGGON U MASCHINENBAU AKT GES GOERLITZ

6) Family number: 21482574 (US2160100A)

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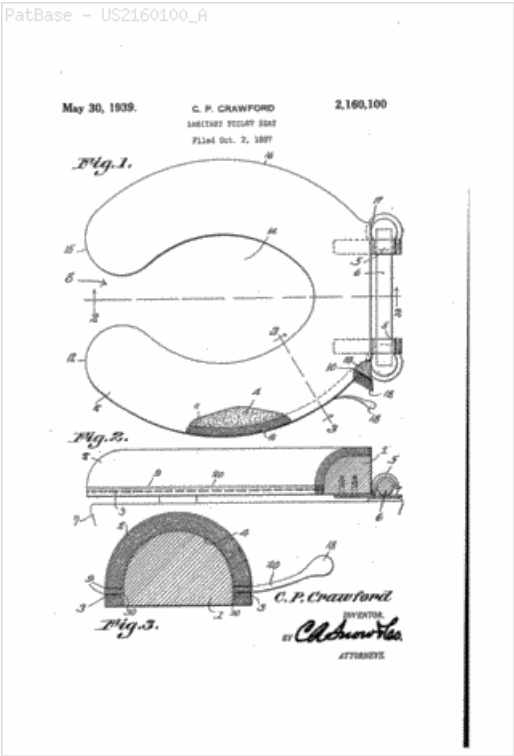
Title: SANITARY TOILET SEAT

Classifications:

International (IPC 8-9): A47K13/16 (Advanced/Invention);
A47K13/00 (Core/Invention)

International (IPC 1-7): A47K13/16

CPC: A47K13/16



Family:

Publication number	Publication date	Application number	Application date
US2160100 A	19390530	US19370167066	19371002

Priority:

US19370167066 19371002

Probable Assignee:	CRAWFORD CHARLES P
Assignee(s): (std):	CRAWFORD CHARLES P
Inventor(s): (std):	CRAWFORD CHARLES P

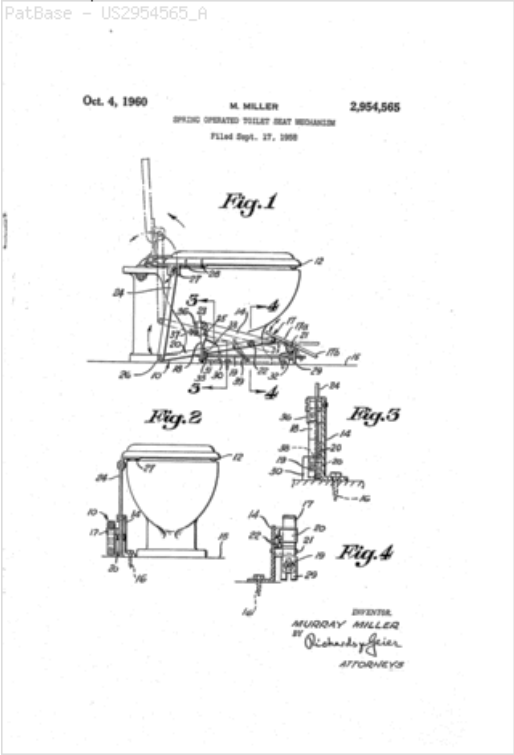
7) Family number: 22822661 (US2954565A) © PatBase

Title: SPRING OPERATED TOILET SEAT MECHANISM

Abstract: (Claim 1) 1. A mechanism for raising and lowering a toilet seat, said mechanism comprising a frame, a pedal swingably mounted intermediate its ends in said frame, said pedal being swingable from a raised position to a lowered position and vice versa, a link connected with said toilet seat, a lever mounted intermediate its ends in said frame and having one end pivotally connected with said link and an other end located in the path of movement of said seat frame, whereby said finger is maintained in said notch to lock said lever in said raised position.

Classifications:

International (IPC 8-9): A47K13/10 (Advanced/Invention);
A47K13/10 (Core/Invention)
International (IPC 1-7): A47K13/10
CPC: A47K13/10 Y10T74/20708 Y10T292/19
European: A47K13/10
US: 292/255 4/246.3 4/246.5 74/539



Family:

Publication number	Publication date	Application number	Application date
US2954565 A	19601004	US19580761559	19580917

Priority:

US19580761559 19580917

Probable Assignee:

MURRAY MILLER

Assignee(s): (std):

MURRAY MILLER

Inventor(s): (std):

MURRAY MILLER

Inventor(s):

MILLER MURRAY

8) Family number: 22528219 (US3284810A)

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Title: TOILET SEAT LIFT

Abstract: (Claim 1) 1. In combination with a toilet having a seat hingedly mounted thereon, toilet seat lift comprising, a member extending downwardly from said seat a connecting means pivotally cojnected to one _nd of said member and extending rearwardly of said seat, a crank arm having one e_id pivotally connected to the other end of said connecting means, an electrical power nicans for rotating said crar_k arm, starter means for energizing said power means to begin the rotation of said crank arm, rmeans for de-energizing said power means to stop the rotation of said arm after it has moved one half a revolution, said starter means adapted to be operated repeatedly for energizing said power means to advance the rotation of said crank arm one-half revolution, and said crank arm being positioned so that at the end of one-half revoluto;on said connecting means has bcn moved rearwardly of said seat to move said seat to a horizontal position and at the end of another onehalf revolution said connecting means is moved forwardly and upwardly for rising said seat to a vertical position.

Classifications:

International (ipc 8-9): A47K13/10 (Advanced/Invention);

A47K13/10 (Core/Invention)

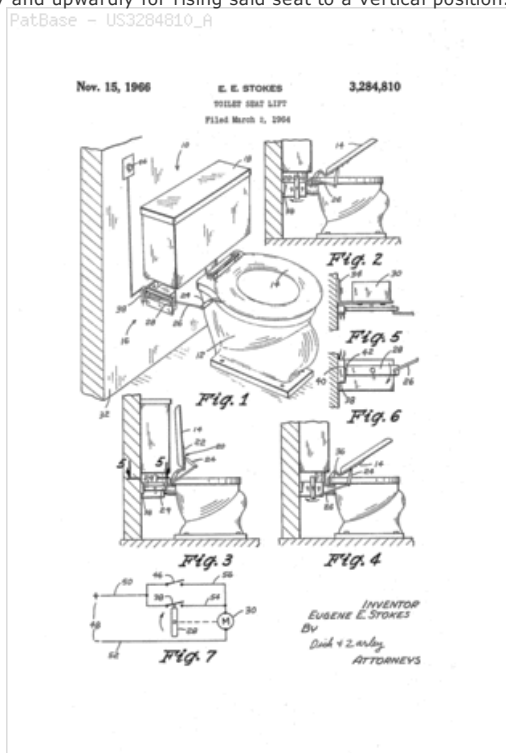
International (ipc 1-7): A47K13/10

CPC: A47K13/10

European: A47K13/10

US: 12/142MC 4/246.1

PatBase - US3284810_A



Family:

Publication number	Publication date	Application number	Application date
US3284810 A	19661115	US19640348342	19640302

Priority:

US19640348342 19640302

Probable Assignee:

STOKES EUGENE E

Assignee(s): (std):

STOKES EUGENE E

Inventor(s): (std):

STOKES EUGENE E

9) Family number: 913482 (US3516095A)

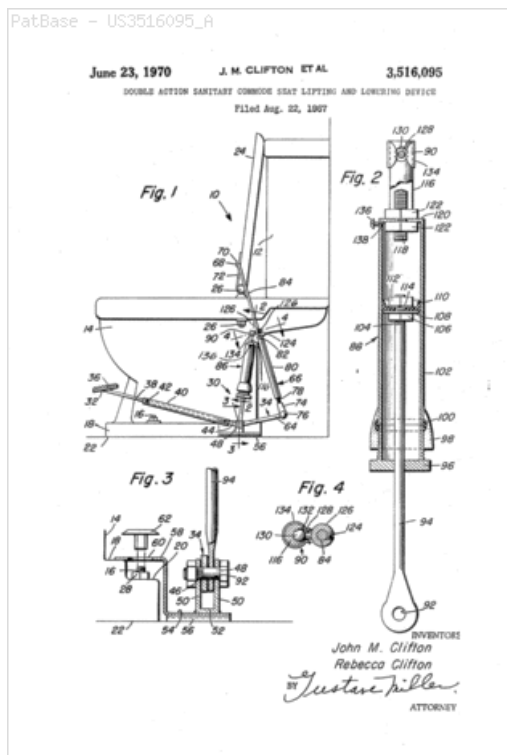
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Title: DOUBLE ACTION SANITARY COMMODE SEAT LIFTING AND LOWERING DEVICE

Abstract: (Claim 1) 1. A sanitary commode seat lifting and lowering devicecomprising a double action single foot pedal usable in alternately lifting and lowering a commode seat, said device comprising a crank arm lever havina a single, decidedly angular bend upwardly in a vertical plane, means for pivotally supporting said crank arm lever at the vertex of said anntilar bend so that said crank lever arm may pivot in a vertical plane on the floor of the commode room, said crank arm lever comprising a long foot pedal lever leg and a relatively shorter commode seat pivoting leg, a link pivoted to said shorter leg at one end and pivotally securable at its other end to the commode seat whereby foot pressure on said foot pedal lifts the commode seat to over dead center in either direction to then permit the commode seat to continue to either raised or lowered position.

Classifications:

International (IPC 8-9): A47K13/10 (Advanced/Invention);
A47K13/10 (Core/Invention)
International (IPC 1-7): A47K13/10
CPC: A47K13/10
European: A47K13/10
US: 4/246.5
Locarno class: 42/51



Family:

Publication number	Publication date	Application number	Application date
US3516095 A	19700623	US19670662426	19670822

Priority:

US19670662426 19670822

Probable Assignee: JOHN M CLIFTON
Assignee(s): (std): JOHN M CLIFTON ; REBECCA A CLIFTON
Inventor(s): (std): CLIFTON JOHN M ; CLIFTON REBECCA A
Inventor(s): JOHN M CLIFTON ; REBECCA A CLIFTON

10) Family number: 7505342 (US4165013A)

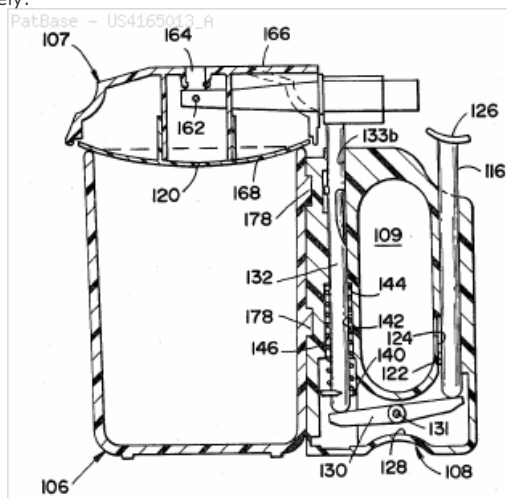
© PatBase

Title: Covered cup

Abstract: A cup having a manually actuated cover is disclosed. The cover is associated with an actuating system disposed in the handle so that thumb pressure on a push rod causes the cover to move upwardly and rotate to one side to uncover the cup and allow the user to drink therefrom. The cover is associated with the actuating system by a socket arrangement to allow removal of the cover for cleaning of the cup and cover separately.

Classifications:

International (IPC 8-9): A47G19/12 A47G19/22 (Advanced/Invention);
A47G19/00 A47G19/22 (Core/Invention)
International (IPC 1-7): A47G19/22 B65D43/16 B65D43/26
CPC: A47G19/12 A47G19/2205
European: A47G19/12 A47G19/22B
US: 220/203.07 220/215 220/264 220/714 220/756 220/813 222/471 222/517



Family:

Publication number	Publication date	Application number	Application date
US4165013 A	19790821	US19780900912	19780428

Priority:

US19770822722 19770808 US19780900912 19780428

Probable Assignee: LUTZ TIMOTHY J
Assignee(s): (std): LUTZ TIMOTHY J

11) Family number: 4834505 (US4534073A)

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Title: Toilet seat lifter

Abstract: A toilet seat lifting apparatus (10) mounted on a commode bowl (52) of conventional design and shown to connect with a water reservoir (53). However, the lifting apparatus is designed to be mounted on various types of toilets such as those having a pressurized water conduits connected directly with the bowl. The apparatus is designed to be mounted contiguous (11) with the surface supporting the toilet seat (46) thereby conveniently positioning a foot pedal (16) at some selected height above the floor and eliminating the need to stabilize the lifting apparatus by contact with the floor. The lifting apparatus features a system of levers (10) mechanically operated by the foot action of the user. The lifting motion produced by the leverage system is compensated by a tension spring (44) incorporated into the structure of the lifting apparatus (10). The tension spring additionally functions to dampen the return of the toilet seat (46) to the resting position (54). The toilet seat lifting apparatus (10) offers a simple design wherein components can be easily assembled and the apparatus readily installed even by a user lacking mechanical skills.

Classifications:

International (IPC 8-9): A47K13/10 (Advanced/Invention);
A47K13/10 (Core/Invention)

International (IPC 1-7): A47K13/10

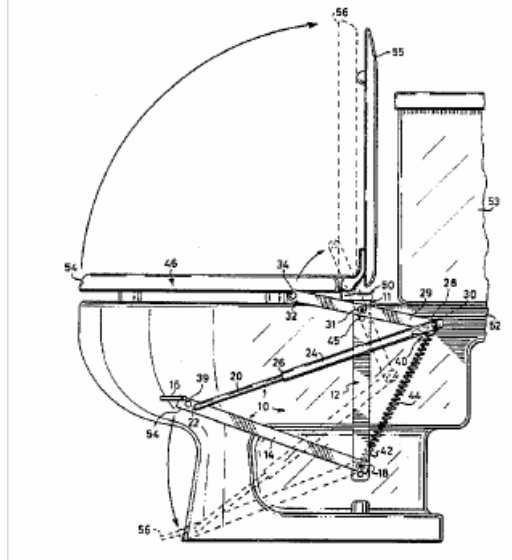
CPC: A47K13/10

European: A47K13/10

US: 4/246.4 4/661

Locarno class: 42/51

PatBase - US4534073_A

**Family:**

Publication number	Publication date	Application number	Application date
US4534073 A	19850813	US19830516206	19830721

Priority:

US19830516206 19830721

Probable Assignee:

SMITH GENE

Assignee(s): (std):

SMITH GENE

Inventor(s): (std):

SMITH GENE

12) Family number: 2869810 (US4807307A)

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Title: DEVICE FOR OPENING AND CLOSING THE SEATING PLATE OF THE LAVATORY UNIT OF THE SEAT TYPE

Abstract: A device for opening and closing the seating plate of the lavatory unit of the seat type wherein the unit is provided with only the seating plate. The device includes a spring for connecting a movable member attached to the unit body with the seating plate freely swingably pivoted on the unit body at one end rim thereof, an opening mechanism for moving the movable member to reverse the urging direction of the spring from its seating-plate-closing direction to its seating-plate-opening direction, and a closing mechanism for causing the seating plate to be closed. When the opening mechanism is made operative, the urging direction of the spring is reversed to open the seating plate. When the unit is provided with the seating and the cover plate. The device includes a pair of springs for connecting a pair of movable members attached to the unit body with the seating and the cover plate, which movable members are freely swingably pivoted on the unit body at one end thereof, a pair of opening mechanism for moving each of the movable members to reverse the urging direction of each spring from its seating- or cover-plate-closing direction to its seating- or cover-plate-opening direction, an interlocking mechanism for interlocking the cover-plate-opening with the seating-plate-opening mechanism, and a closing mechanism for causing the cover plate to be closed. The cover plate is thus similarly opened by the urging action of the spring and when the seating plate is opened, the cover-plate-opening mechanism is interlocked with this seating-plate-opening action to open the cover plate.

Classifications:

International (IPC 8-9): A47K13/10 (Advanced/Invention);
A47K13/10 (Core/Invention)

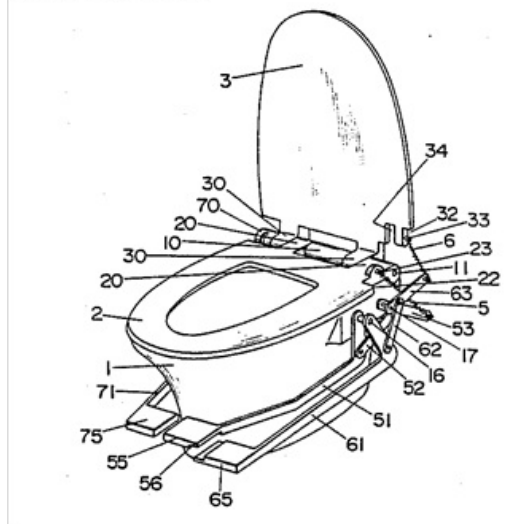
International (IPC 1-7): A47K13/10

CPC: Y10T74/20207 Y10T74/20528 A47K13/10

European: A47K13/10

US: 4/246.4 4/251 74/479 74/479.01 74/512

Locarno class: 42/51

**Family:**

Publication number	Publication date	Application number	Application date
JP1784829 C3	19930831	JP19860267146	19861110
JP4076698 B4	19921204	JP19860267146	19861110
JP63186615 A2	19880802	JP19860267146	19861110
US4807307 A	19890228	US19870118014	19871109

Priority:

JP19860267146 19861110

Probable Assignee: HAKUJU INST FOR HEALTH SCIENCE CO LTD**Assignee(s):** (std): HAKUJU INST FOR HEALTH SCIENCE ; HASEGAWA TOSHIHISA ; SATO NOBORU ; MATSUSHITA ELECTRIC WORKS LTD**Assignee(s):** MATSUSHITA DENKO KK ; HAKUJU INST FOR HEALTH SCIENCE CO ; HAKUJU INST FOR HEALTH SCIENCE CO LTD ; HAKUJU INSTITUTE FOR HEALTH SCIENCE CO LTD ; HAKUJU INST**Inventor(s):** (std): HASEGAWA TOSHIHISA ; SATO NOBORU ; SATO TORU**13) Family number: 6508859 (US4862525A)**

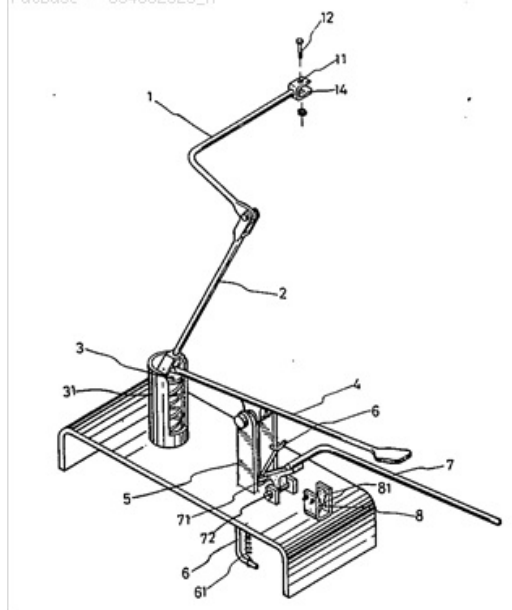
© PatBase

Title: Lavatory seat controller

Abstract: A lavatory seat controller which makes use of a lever by pressing on a pedal coupled to a lavatory seat lifting pedal rod to drive a straight push rod to rotate through a predetermined angle to lift the lavatory seat. The seat is lowered by pressing on the lavatory seat drawback pedal rod to drive a stop block connected thereto and thereby to push a Y-shaped guide rod and to further push the lavatory seat lifting pedal rod upward and to cause the straight push rod to move downward so as to rotate the L-shaped operating lever backward through the predetermined angle to draw back the lavatory seat.

Classifications:**International (IPC 8-9):** A47K13/10 (Advanced/Invention); A47K13/10 (Core/Invention)**International (IPC 1-7):** A47K13/10**CPC:** A47K13/10**European:** A47K13/10**US:** 4/246.5**Locarno class:** 42/51

PatBase - US4862525_A

**Family:**

Publication number	Publication date	Application number	Application date
GB2219606 A1	19891213	GB19880013884	19880611
GB8813884 A0	19880713	GB19880013884	19880611
US4862525 A	19890905	US19880204128	19880609

Priority:

US19880204128 19880609 GB19880013884 19880611

Probable Assignee: CHENG CHEN H**Assignee(s):** (std): CHEN HSIANG CHENG ; CHENG CHEN H ; CHENG CHEN HSIANG**Inventor(s):** (std): CHENG CHEN HSIANG ; CHENG CHEN H**Inventor(s):** CHEN HSIANG CHENG**14) Family number: 5078822** (US5129112A)

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Title: Bathtub chair lift

Abstract: A support is provided which is attachable to the side walls of the bathtub. An actuator is provided which includes an elongated tubular member and an inner member adapted to be moved to inner and outer positions relative to the tubular member. Structure is provided for coupling the actuator to the support. A D.C. powered reversible, electric motor is provided for moving the inner member of the actuator to its inner and outer position. A chair is coupled to the outer end of the inner member and a coupling apparatus is provided for pivotally and slidably coupling the chair to the support for allowing the chair to be moved to an upper and lower positions above the bottom of the bathtub and sideways when in the upper position. In addition, a control system is located within the reach of a person sitting in the chair while the chair is in its upper and lower positions above the bottom of the tub to allow the person to control the electric motor to move the inner member of the actuator to its inner and outer positions and hence the chair to its upper and lower positions.

Classifications:**International (IPC 8-9):** A61G7/10 (Advanced/Invention);

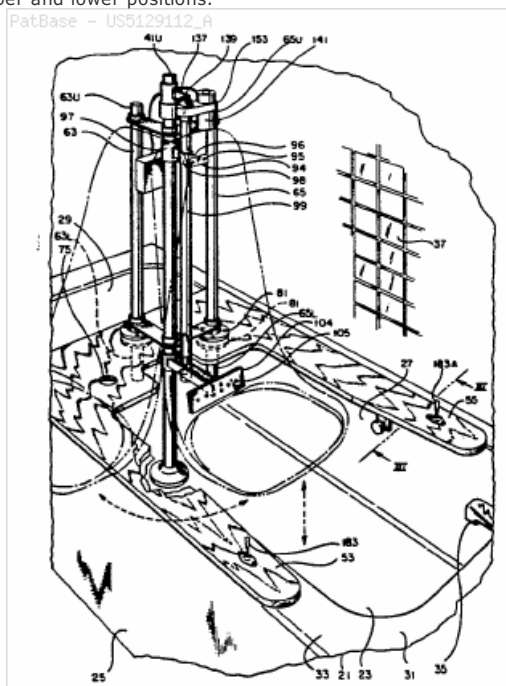
A61G7/10 (Core/Invention)

International (IPC 1-7): A47K3/12**CPC:** A61G7/1003 A61G7/1019 A61G7/1044 A61G7/1059

A61G7/1076

European: A61G7/10A2 A61G7/10N6 A61G7/10S4 A61G7/10T10

A61G7/10Z4

US: 4/560.1 4/562.1**Family:**

Publication number	Publication date	Application number	Application date
US5129112 A	19920714	US19910714256	19910612

Priority:

US19900562466 19900803

Probable Assignee:

SCHAFER RICHARD C

Assignee(s): (std):

SCHAFER RICHARD C

Inventor(s): (std):

SCHAFER RICHARD C

15) Family number: 8646876 (US5461734A)

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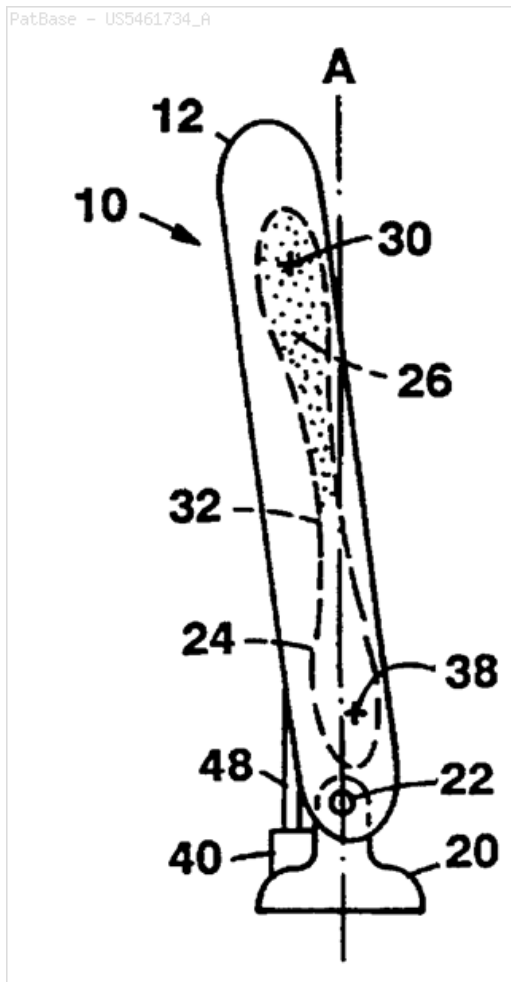
Title: Automatic toilet seat lowering

Abstract: A toilet seat assembly for automatically closing a toilet seat includes a mount for attachment of the toilet seat to a conventional toilet bowl. The toilet seat is rotatably connected to the mount for movement between a first upright position and a lowered position. A chamber containing a movable mass is associated with the toilet seat. The mass moves in response to the force of gravity resulting in the movement of the center of gravity of the toilet seat from a first non-closing position to a second closing position causing the toilet seat to automatically close. The toilet seat assembly includes a connection of the toilet seat to the mount constructed and arranged to prevent rotation of the toilet seat about the mount to selectively maintain the toilet seat in a second upright position.

Classifications:**International (IPC 8-9):** A47K13/10 (Advanced/Invention);

A47K13/10 (Core/Invention)

International (IPC 1-7): A47K13/10 A47K13/12**CPC:** A47K13/10**European:** A47K13/10**US:** 4/240 4/241 4/246.1 4/246.2 424/610

**Family:**

Publication number	Publication date	Application number	Application date
AU199539690 A1	19960506	AU19950039690	19951011
US5461734 A	19951031	US19940321725	19941012
WO9611621 A1	19960425	WO1995US13833	19951011

Priority:

US19940321725 19941012 WO1995US13833 19951011

Probable Assignee: MICHAEL FAIRCLOTH D

Assignee(s): (std): FAIRCLOTH D MICHAEL ; MICHAEL FAIRCLOTH D

Assignee(s): D MICHAEL FAIRCLOTH ; FAIRCLOTH D

Inventor(s): (std): FAIRCLOTH D MICHAEL

Inventor(s): D MICHAEL FAIRCLOTH ; FAIRCLOTH D

Designated states: AT AU BB BE BG BR CA CH CN CZ DE DK ES FI FR GB GR IE IT JP KE KP KR LK LU MC MX NL NZ PL PT RO RU SE VN

16) Family number: 12465712 (US5504947A)

© PatBase

Title: Automatic toilet seat lowering apparatus

Abstract: An automatic toilet seat closing apparatus that operates on a controlled release of air. A control cylinder coupled to a seat closure member is secured to a conventional toilet bowl by placement of a universal support base positionable beneath the coupling hinge used by the seat. A water sensor is available for placement in a conventional water closet allowing release of air when the water level drops due to flushing of the toilet bowl. Alternatively, the apparatus will allow a controlled lowering of the toilet seat allowing the apparatus to be coupled to toilet bowls having water savers or non-conventional water closets such as those found on motor homes and boats. In addition, the device may be integrated into new toilet structures thereby eliminating the need for a separate support base.

Classifications:

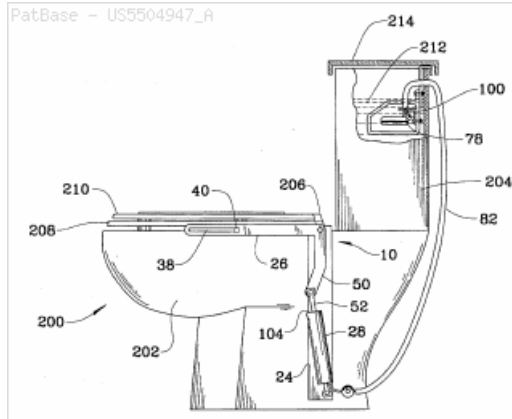
International (IPC 8-9): A47K13/10 (Advanced/Invention)

International (IPC 1-7): A47K13/10

CPC: A47K13/10

European: A47K13/10

US: 4/246.1 4/246.3 4/248

**Family:**

Publication number	Publication date	Application number	Application date
US5504947 A	19960409	US19950423775	19950418

Priority:

US19950423775 19950418

Probable Assignee: ROBELLOP RUSSELL J**Assignee(s):** (std): ROBELLOP RUSSELL J**Assignee(s):** ALAS DEBORAH A**Inventor(s):** (std): ALAS DEBORAH A ; ROBELLOP RUSSELL J**17) Family number: 13257121** (GB2295167A)

© PatBase

Title: TOILET SEAT LIFTING DEVICE

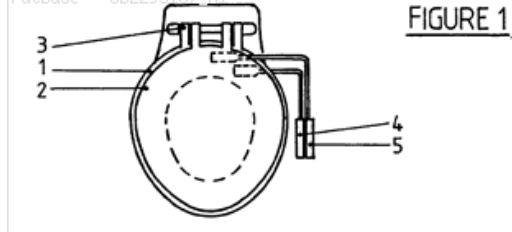
Abstract: A toilet seat 1 and its associated cover 2 are provided with one or more handle or handles borne on a lever or levers attached to said toilet seat 1 and cover 2 in order to raise the seat remotely with optional incorporation of pneumatic, hydraulic or electrical means operated directly or by a pedal, button, switch, cord or chain. A return spring with or without a hydraulic, pneumatic or friction damper may be provided to lower the seat after use as necessary, and an adjustor may be provided to accommodate varying seat heights.

Classifications:**International (IPC 8-9):** A47K13/10 (Advanced/Invention);

A47K13/10 (Core/Invention)

International (IPC 1-7): A47K13/10**CPC:** A47K13/10**European:** A47K13/10

PatBase - GB2295167_A1

**FIGURE 1****Family:**

Publication number	Publication date	Application number	Application date
GB2295167 A1	19960522	GB19940023456	19941121
GB2295167 B2	19990224	GB19940023456	19941121
GB9423456 A0	19950111	GB19940023456	19941121

Priority:

GB19940023456 19941121

Probable Assignee: SHERR JEREMY**Assignee(s):** (std): SHERR JEREMY**Assignee(s):** JEREMY SHERR**Inventor(s):** (std): SHERR JEREMY**Inventor(s):** JEREMY SHERR**18) Family number: 10767606** (US5742949A)

© PatBase

Title: Toilet seat lowering apparatus

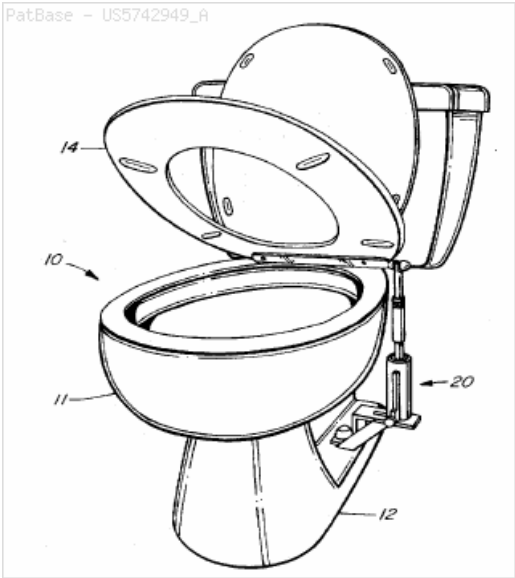
Abstract: A toilet seat lowering apparatus automatically lowers a toilet seat from an upright position to a lowered position. The apparatus has a base which can be fitted onto an existing toilet. A fluid-containing housing is attached to the base, and a piston is contained within the housing. A piston rod which extends upwardly through the top of the housing is coupled to an arm attached to the toilet seat by an adjustable connecting rod assembly. A conduit formed external to the housing allows fluid to flow between chambers within the housing in response to pressure differentials between the chambers. The rate of flow of fluid and the speed at which the seat is lowered by gravity can be adjusted by the user. The seat can also be quickly manually lifted or lowered.

Classifications:**International (IPC 8-9):** A47K13/10 (Advanced/Invention);

A47K13/10 (Core/Invention)

International (IPC 1-7): A47K13/10**CPC:** A47K13/10

European: A47K13/10
US: 4/246.2 424/620



Family:

Publication number	Publication date	Application number	Application date
US5742949 A	19980428	US19960669031	19960617

Priority:

US19960669031 19960617

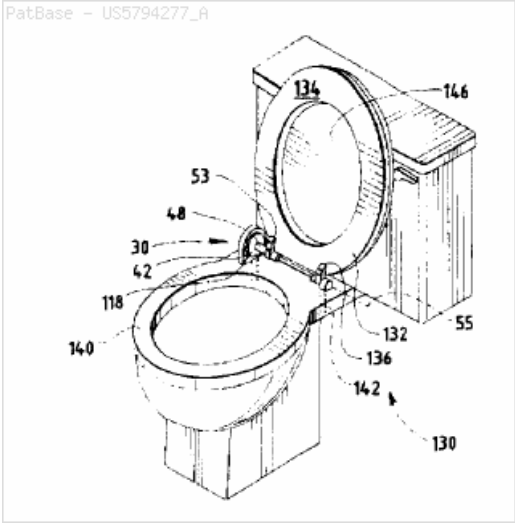
Probable Assignee: GOLDI EMIL
Assignee(s): (std): GOLDI EMIL ; PFISTERER WERNER E
Inventor(s): (std): GOLDI EMIL ; PFISTERER WERNER E

19) Family number: 11083223 (US5794277A) © PatBase

Title: Automatic toilet seat closing device

Abstract: A device automatically closes the cover of a container after a predetermined time interval and is used in combination with a timing member, such as a conventional mechanical timer, that includes timer mechanism for measuring a predetermined time interval, a shaft that is rotatable between a de-activated position and an activated position, and an arm that is moveable between an extended position and a retracted position. The device includes a plate member, a first hinge assembly, a first hinge member, a coupling mechanism, a gear, and a connection mechanism. The first hinge assembly includes a cylindrical member that is rotatable in a first direction and a second direction and has a chamber which is sized to receive a portion of the shaft. The hinge member is secured to the cylindrical member and rotates concurrently with the cylindrical member. The coupling mechanism couples the hinge assembly to the timing member such that rotation of the cylindrical member in the first direction rotates the shaft from the de-activated position to the activated position. The gear is rotatable between a rest position and an energized position. The connection mechanism connects the gear to a portion of the cylindrical member such that rotation of the cylindrical member in the first direction rotates the gear from the rest position to the energized position. The device also includes a retention coupling mechanism that couples the gear to the arm when the arm is in the retracted position and thereby retains the gear in the energized position, a reverse rotation mechanism that rotates the gear from the energized position to the rest position at the completion of the pre-determined time interval, and an attaching member that attaches the cover of the container to the first hinge member such that the cover moves to the closed position when the cylindrical member rotates in the second direction.

Classifications:
International (IPC 8-9): A47K13/10 A47K13/12 (Advanced/Invention); A47K13/00 A47K13/10 (Core/Invention)
International (IPC 1-7): A47K13/12
CPC: A47K13/10 A47K13/12
European: A47K13/10 A47K13/12
US: 4/236 4/240 4/246.1
Locarno class: 42/36



Family:

Publication number	Publication date	Application number	Application date
US5794277 A	19980818	US19970818094	19970314

Priority:

US19970818094 19970314

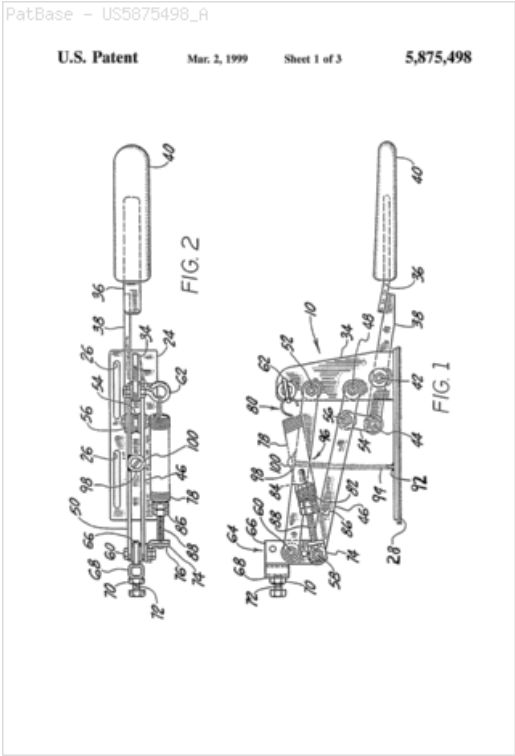
Probable Assignee: JONES CLIFFORD D
Assignee(s): (std): JONES CLIFFORD D
Inventor(s): (std): JONES CLIFFORD D

20) Family number: 18793241 (US5875498A) © PatBase

Title: Toilet seat lifting device

Abstract: A toilet seat lifting device for selectively raising and lowering the seat of a toilet includes a base disposed on a floor surface, a stanchion secured to the front of the base, and a foot pedal pivotably mounted to the stanchion. A plurality of link arms are pivotably mounted to the stanchion and are linked to the foot pedal so that movement of the foot pedal pivots the link arms. Mounted to the distal ends of the link arms is a lifting arm retaining member which carries an elongated lifting arm capable of vertical repositioning on the lifting arm retaining member to accommodate variously-sized toilet bowls and seats. The upper end of the lifting arm is attached to the under-side of the toilet seat. A main spring attached to the link arms assists in raising and dampens the lowering of the toilet seat, and a helper spring projecting upwardly from the base between the link arms engages when the toilet seat goes past the top dead center position in order to assist in returning the toilet seat to the lowered state.

Classifications:
International (IPC 8-9): A47K13/10 (Advanced/Invention);
A47K13/10 (Core/Invention)
International (IPC 1-7): A47K13/10
CPC: A47K13/10
European: A47K13/10
US: 4/246.1 4/246.4 4/246.5 424/650



Family:

Publication number	Publication date	Application number	Application date
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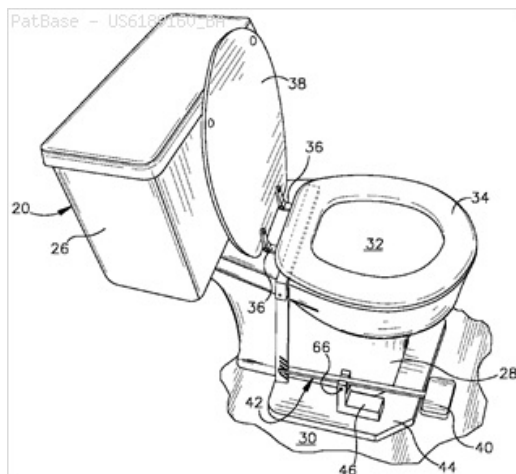
Priority:
US19980080978 19980519
Probable Assignee: JOSEPH JOHN GIBSON
Assignee(s): (std): JOSEPH JOHN GIBSON
Inventor(s): (std): JOSEPH JOHN GIBSON

21) Family number: 14962214 (US6189160B) © PatBase

Title: Toilet seat-lifting device

Abstract: A toilet seat-lifting device including a lever assembly coupled to the toilet seat which selectively moves the seat between a lower position whereat it rests on top edges of the toilet bowl to an upper position whereat it is raised above the top edges of the toilet bowl. The lever assembly is mounted on a platform that rests on the floor and a pedal attached to the lever assembly in such a manner that as the pedal is pushed downward, the toilet seat is lifted to the upper position. The platform provides a stable support for the lever assembly without having to directly attach the device to the toilet's base or floor. Also, the seat-lifting device is adapted to allow mounting of the stand on either the right-hand or left-hand side of the toilet. Further, the lever assembly includes an adjustable connection between a lift arm and a pedal-connecting arm to accommodate different height toilet bases and/or different desired upper positions. Additionally or alternatively, a seat-interface may be provided for attachment of the lever assembly to the toilet seat.

Classifications:
International (IPC 8-9): A47K13/10 (Advanced/Invention)
International (IPC 1-7): A47K13/10 A61C17/06
CPC: A47K13/10
European: A47K13/10
US: 4/246.1 4/246.3



Family:

Publication number	Publication date	Application number	Application date
AU200024141 A1	20000801	AU20000024141	20000114
AU200024141 A5	20000801	AU20000024141D	20000114
CA2360596 AA	20010716	CA20002360596	20000114
EP1158889 A2	20011205	EP20000902421	20000114
US6189160 BA	20010220	US19990231468	19990114
WO0041609 A1	20000720	WO2000US01022	20000114
WO0041609 B1	20000827	WO2000US01022	20000114

Priority:

US19980071816P 19980120 US19980074981P 19980217 US19980090250P 19980622
US19980096741P 19980817 US19990231468 19990114 US19990231468 19990114
WO2000US01022 20000114

Probable Assignee: PETTUS SR GODFREY L

Assignee(s): (std): MARGO SMALL BUSINESS DEV AND CON ; MARGO SMALL BUSINESS DEVELOPEM

Assignee(s): MARGO SMALL BUSINESS DEVELOPEMENT AND CONSULTING L ; MARGO SMALL BUSINESS DEVELOPEMENT AND CONSULTING LTD ; MARGO SMALL BUSINESS DEVELOPMENT AND CONSULTING LT ; MARGO SMALL BUSINESS DEVELOPMENT AND CONSULTING LTD ; PETTUS GODFREY L ; PETTUS SR ; PETTUS SR GODFREY L

Inventor(s): (std): PETTUS GODFREY L

Inventor(s): GODFREY L PETTUS

Agent(s): SPRUSON AND FERGUSON; CULLENS PATENT AND TRADE MARK ATTORNEYS; CULLENS PTY LTD; MOFFAT AND CO

Designated states: AT AU BE CA CH CY DE DK ES FI FR GB GR IE IT LU MC NL NZ PT SE

22) Family number: 28020680 (US6510562B)

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Title: Toilet seat lifting device

Abstract: A toilet lifting apparatus in which a spring mechanism causes a toilet seat to rise after flushing of the toilet. The spring mechanism is controlled by a bolting device which is connected to the spring mechanism at one end and to a cable at another end so that upon flushing the cable moves the bolting mechanism thereby releasing the spring mechanism. The spring mechanism can vary its resiliency which in turn varies the speed by which the toilet seat rises from its seated position upon flushing. A urine guard is also provided.

Classifications:

International (IPC 8-9): A47K13/10 (Advanced/Invention);

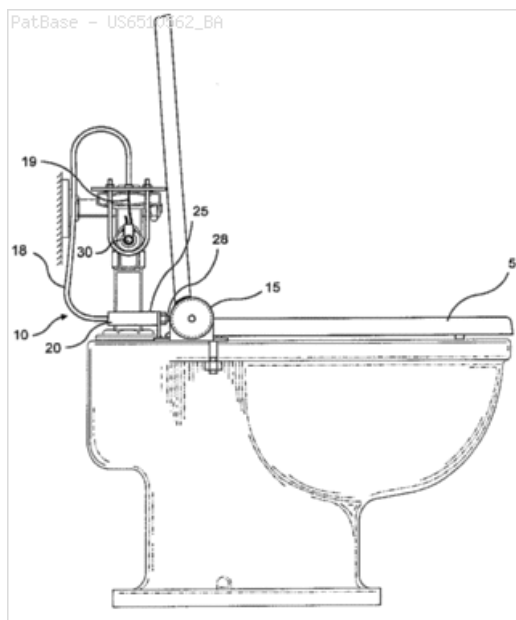
A47K13/10 (Core/Invention)

International (IPC 1-7): A47K13/10

CPC: A47K13/10

European: A47K13/10

US: 4/241 4/246.1 424/610



Family:

Publication number	Publication date	Application number	Application date
US6510562 BA	20030128	US20000685129	20001010

Priority:

US20000685129 20001010

Probable Assignee:

SK VENTURES INC

Assignee(s): (std):

S K VENTURES INC

Assignee(s):

SK VENTURES INC

Inventor(s): (std):

BAE KYONG SUP ; SHIM KEE SUP

23) Family number: 30358208 (US2004045081A)

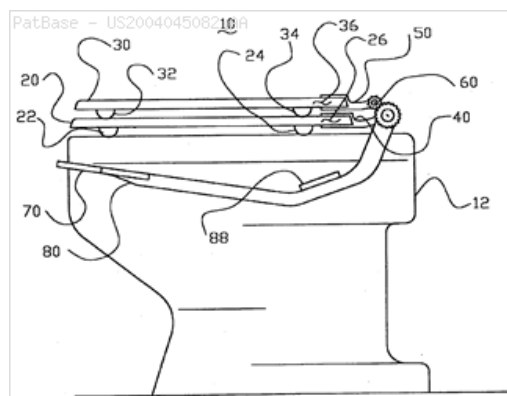
© PatBase

Title: TOILET SEAT AND COVER SYSTEM

Abstract: The toilet seat and cover system for lifting and placing a toilet seat and cover on an open end of a toilet bowl includes a hinge attached to one end of the toilet bowl opening which also attaches to an end of the toilet seat and toilet cover. The system also includes a first lever located on one side of the toilet bowl which is coupled via a gear to the hinge such that downward radial movement of the first lever causes the toilet cover to swing from a substantially horizontal position to a substantially vertical position. A second lever is located adjacent the first lever and coupled to the hinge via another gear such that downward radial movement of the second lever causes the toilet seat to swing from a substantially horizontal position to a substantially vertical position.

Classifications:**International (IPC 8-9):** A47K13/10 (Advanced/Invention);

A47K13/10 (Core/Invention)

International (IPC 1-7): A47K13/10**CPC:** A47K13/10**European:** A47K13/10**US:** 4/246.1 4/246.3 4/246.4**Family:**

Publication number	Publication date	Application number	Application date
BRPI0305609 A	20040914	BR2003PI05609	20030908
EP1397989 A1	20040317	EP20030077821	20030908
US2004045081 AA	20040311	US20020237294	20020909
US2004045082 AA	20040311	US20030372467	20030221
US6807687 BB	20041026	US20030372467	20030221

Priority:

US20020237294 20020909 US20030372467 20030221

Probable Assignee: MARRAS LEONARDO SALVADOR**Assignee(s): (std):** MARRAS LEONARDO SALVADOR**Assignee(s):** LEONARDO SALVADOR MARRAS**Inventor(s): (std):** MARRAS LEONARDO SALVADOR**Inventor(s):** LEONARDO SALVADOR MARRAS**Designated states:** AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR**24) Family number: 31338970 (US2004067762A)**

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Title: METHOD AND DEVICE FOR ENTERING TEXT

Abstract: A method of text entry in a mobile communication device includes highlighting a representation of a key on a display and scrolling through a predetermined sequence of representations of a plurality of keys and highlighting one of the representations. If the device is operating in a first mode, the method includes selecting the highlighted representation of a key, generating a key identifier sequence, and providing the key identifier sequence as input to a software application which associates each key identifier sequence with a set of words whose spellings correspond to the key identifier sequence and which presents on the display at least one word whose spelling corresponds to the input key identifier sequence. If the device is operating in a second mode, the method includes selecting a character of the set of characters associated with the highlighted representation of a key, and presenting the selected character on the display.

Classifications:**International (IPC 8-9):** G06F1/16 G06F17/22 G06F3/02 G06F3/023

G06F3/033 G06F3/0362 G06F3/048 G06T3/00 G06T3/60 G09G5/00

H01H25/00 H01H25/04 H01H89/00 H03M11/06 H04B1/38 H04M1/00

H04M1/02 H04M1/23 H04M1/247 H04M1/272 H04M1/274

H04M1/725 (Advanced/Invention);

G06F1/16 G06F3/00 G06F3/02 G06F3/023 G06F3/033 G06T3/00

G06T3/60 H04B1/38 H04M1/02 H04M1/23 H04M1/247

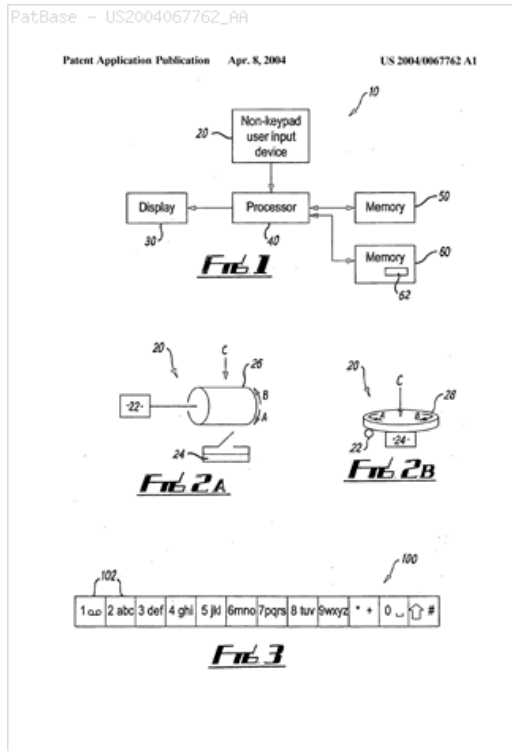
H04M1/725 (Advanced/Non-invention);

G06F3/02 G06F3/033 H04M1/00 H04M1/23 H04M1/272

H04M1/72 (Core/Invention)

International (IPC 1-7): G06F17/22 G06F17/30 G06F3/00 G06F3/02

G06F3/023 G06F3/033 G06F3/12 G06T3/00 G06T3/60 G09G5/00
H03M11/06 H04M1/00 H04M1/02 H04M1/23 H04M1/247 H04M1/272
H04M1/274 H04M1/725 H04Q7/20
CPC: G06F3/0237 H04M1/7258 H04M1/72561 G06F3/0213
G06F3/0362 H04M1/72544 H04M1/72547 G06F3/0233 G06F3/0234
G06F3/0236 H04M1/233 H04M1/72583 H04M2250/70 G06F3/033
H04M1/23
European: G06F3/023M G06F3/023M2 G06F3/023M6 G06F3/023M8
G06F3/02A3P G06F3/033 G06F3/033Z8 G06F3/033Z8C G06F3/0362
H04M1/23 H04M1/23P H04M1/725F3 H04M1/725F4 T04M1/23
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US: 200/11.00R 200/11R 200/5.00R 200/5R 345/156 345/156P
345/169 345/184 345/184P 345/660 345/660P 455/466 455/466P
455/550.1 455/550.100P 455/566 455/566.1 455/566P 455/566S
455/575.1 455/90.3 455/90.300P 707/3 707/999.003 707/999.003S
715/773 715/773P 715/864 715/864S



Family:

Publication number	Publication date	Application number	Application date
AT433146 E	20090615	AT20030732763T	20030425
AT499793 E	20110315	AT20040724321T	20040330
AU2003230055 AA	20040423	AU20030230055	20030507
AU2003240148 AA	20040423	AU20030240148	20030425
AU2003267469 AA	20040423	AU20030267469	20031002
AU2003269291 AA	20050406	AU20030269291	20030915
BRPI0410459 A	20060613	BR2004PI10459	20040527
BRPI0410618 A	20060620	BR2004PI10618	20040414
CA2528617 AA	20051206	CA20042528617	20040414
CN100361052 C	20080109	CN20038023219	20030507
CN101025672 A	20070829	CN200710001320	20030425
CN101025672 B	20111228	CN200710001320	20030425
CN1301487 C	20070221	CN20038023572	20030425
CN1685303 A	20051019	CN20038023219	20030507
CN1689039 A	20051026	CN20038023572	20030425
CN1795659 A	20060628	CN200480014540	20040527
CN1802625 A	20060712	CN200480015890	20040414
CN1839612 A	20060927	CN20038027074	20030915
CN1843020 A	20061004	CN200480019516	20040330
DE10392170 T5	20041111	DE20031092170T	20031002
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DE60327866 D1	20090716	DE20036027866	20030425
EP1546851 A1	20050629	EP20030722896	20030507
EP1547011 A1	20050629	EP20030732763	20030425
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EP1621000 A1	20060201	EP20040724321	20040330
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EP1668872 A1	20060614	EP20030751071	20030915
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EP1898300 A3	20100407	EP20070020126	20030425
FI20021759 A0	20021003	FI20020001759	20021003
GB200411801 A0	20040630	GB20040011801	20031002
GB2399439 A1	20040915	GB20040011801	20031002
GB2399439 B2	20060118	GB20040011801	20031002
HK1091630 A3	20070119	HK20060111915	20061027
HK1094055 A3	20070316	HK20070100119	20070104
HK1094493 A3	20070330	HK20070101353	20070205
JP2006526214 T2	20061116	JP20060508406T	20040414
JP2008176805 A2	20080731	JP20080036805	20080219
JP4111982 B2	20080702	JP20060508406T	20040414
KR100735815 B1	20070706	KR20057022701	20040527
KR100763454 B1	20071005	KR20057023560	20040414
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KR20060038391 A	20060503	KR20057023560	20040414
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US2004067762 AA	20040408	US20030434055	20030508
US2004239692 AA	20041202	US20030449036	20030529
US2004253931 AA	20041216	US20030458401	20030610
US2005041011 AA	20050224	US20030496917	20031002
US2005273724 AA	20051208	US20030527486	20030507
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US7395081 BB	20080701	US20050556070	20051108
US7395081 BB	20080701	US20040556070	20040330
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WO04031931 A1	20040415	WO2003F100719	20031002
WO04031932 A1	20040415	WO2003IB01775	20030507
WO04032053 A1	20040415	WO2003IB01974	20030425
WO04100510 A1	20041118	WO2004IB00962	20040330
WO04107715 A1	20041209	WO2004IB01743	20040527
WO04107715 C1	20051201	WO2004IB01743	20040527
WO04109486 A2	20041216	WO2004IB01126	20040414
WO04109486 A3	20050512	WO2004IB01126	20040414
WO05027473 A1	20050324	WO2003IB03926	20030915

Priority:

FI20020001759	20021003	EP20030732763	20030425	WO2003IB01974	20030425
WO2003IB01775	20030507	US20030434055	20030508	US20030449036	20030529
US20030458401	20030610	WO2003IB03926	20030915	WO2003F100719	20031002
WO2004IB00962	20040330	JP20060508406	20040414	JP20060508406T	20040414
WO2004IB01126	20040414	WO2004IB01743	20040527	WO2003IB01974	20050331
WO2004IB00962	20051107	US20050556070	20051108	WO2004IB01743	20051128
WO2004IB01126	20051208	WO2003IB01974	20071227		

Probable Assignee: RPX CORP

Assignee(s): (std):	BONNELYKKE KRISTENSEN JAKOB ; CHRISTJANSEN RASMUS ; HARD JOHN ; KEINONEN TURKKA ; JOERESSEN OLAF ; NOKIA CORP ; JUUL JAKOBSEN JANNE ; KNUDSEN CHRISTIAN SAXE ; JAKOBSEN JANNE JUUL ; KNUDSEN CHRISTOPHER SAXE ; KRISTENSEN JAKOB BOENNELYKKE ; SILFVERBERG MIIKA ; WIKBERG HARRI ; SCHARFF CHRISTIAN ; STAGSTED LONE ; SAXE KNUDSEN CHRISTIAN ; PEDERSEN THOMAS ; PEDERSEN TOMAS ; BALLE HENRIK
Assignee(s):	BONNELYKKE JAKOB ; RPX CORP ; NOKIA CORPP.O. BOX 226NOKIA GROUPFIN-00045HELSINKIFI ; JAKOBSEN JANNE ; NOKIA CORP ESPOO
Inventor(s): (std):	BALLE H PEDERSEN T ; BALLE HENRIK ; BOENNELYKKE CHRISTJANSEN RASMU ; BONNELYKKE JAKOB ; BONNELYKKE KRISTENSEN JAKOB ; HENRIK BALLE ; JAKOB BOENNELYKKE KRISTENSEN ; JAKOBSEN JANNE ; JAKOBSEN JANNE J ; JAKOBSEN JANNE JUUL ; JANNE JUUL JAKOBSEN ; JOERESSEN OLAF ; JOHN BALLE HENRIK HARD ; JOHN HARD ; JUUL JAKOBSEN JANNE ; KEINONEN TURKKA ; CHRISTIAN BALLE HENRIK STAGSTE ; CHRISTIAN SAXE KNUDSEN ; CHRISTIAN SCHARFF ; CHRISTJANSEN RASMUS ; KNUDSEN CHRISTIAN S ; KNUDSEN CHRISTIAN SAXE ; KNUDSEN CHRISTOPHER SAXE ; OLAF JOERESSEN ; PEDERSEN THOMAS ; PEDERSEN TOMAS ; PEDERSON THOMAS ; RASMUS CHRISTJANSEN ; SAXE BONNELYKKE KRISTENSEN JAK ; SAXE KNUDSEN CHRISTIAN ; SCHARFF CHRISTIAN ; SILFVERBERG MIIKA ; STAGSTED LONE ; HARD JOHN ; KRISTENSEN JAKOB BOENNELYKKE ; LONE STAGSTED ; WIKBERG HARRI
Inventor(s):	BALLE H ; MIIKA SILFVERBERG ; KRISTENSEN JAKOB BOENNELYKKEDK ; HARRI WIKBERG ; TOMAS PEDERSEN ; TURKKA KEINONEN ; KRISTENSEN JAKOB ; CHRISTJANSEN RASMUS KRISTENSEN JAKOB BOENNELYKKE ; CHRISTJANSEN RASMUSDK ; KNUDSEN CHRISTIAN ; BONNELYKKE KRISTENSEN JAKOB CHRISTJANSEN ; BONNELYKKE KRISTENSEN JAKOB CHRISTJANSEN RASMUS BA ; BONNELYKKE KRISTENSEN JAKOB CHRISTJANSEN RASMUS BALLE HENRIK STAGSTED LONE JUUL JAKOBSEN JANNE SAXEKNUDSEN CHRISTIAN PEDERSEN THOMAS ; BALLE HENRIK HARD JOHN ; BALLE HENRIK STAGSTED LONE JAKOBSEN JANNE JUUL ; BALLE HENRIK STAGSTED LONE JAKOBSEN JANNE JUUL SAX ; BALLE HENRIK STAGSTED LONE JAKOBSEN JANNE JUUL SAXE KNUDSEN CHRISTIAN
Agent(s):	SIM AND MCBURNEY ; HIGGIN PAUL ; SKINNER MICHAEL PAUL ; CRAWFORD MAUNU ; WARE FRESSOLA VAN DER SLUYS AND , ADOLPHSON LLP ; WARE FRESSOLA VAN D SLUYS AND ADOLPHSON LLP ; PERMAN AND GREEN ; BANNER AND WITCOFF ; PERMAN AND GREEN LLP ; BANNER AND WITCOFF LTD
Designated states:	AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

25) Family number: 31058653 (US2004199987A)

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Title: TOILET SEAT LIFTER WITH FLUSHER

Abstract: A mechanism for raising and lowering a toilet seat in response to actuation of foot pedals. An actuation cylinder with a contained piston is connected between the toilet bowl and the toilet seat. Water from the supply line for the toilet is routed to the actuator cylinder when a seat up pedal is depressed and causes the piston to extend out of the actuation cylinder and raise the seat. Operation of a flush pedal causes the water within the actuation cylinder to drain so that the toilet seat lowers. A mechanical linkage from the flush pedal to the flush mechanism of the toilet links toilet flushing to the seat lowering action, ensuring that the seat is lowered after each flush.

Classifications:

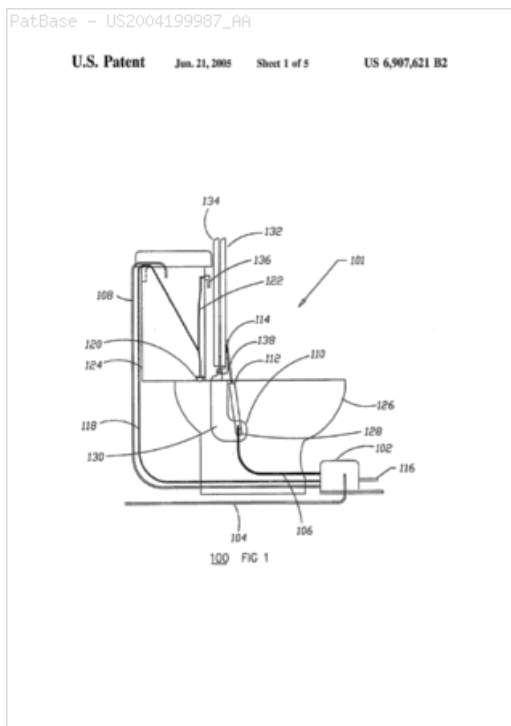
International (IPC 8-9): A47K13/10 (Advanced/Invention);

A47K13/10 (Core/Invention)

International (IPC 1-7): A47K13/10

CPC: A47K13/10

European: A47K13/10
US: 4/243.1 4/246.1 4/246.2 4/246.3 4/249 42/431 42/461 42/462
42/463 42/49 424/610



Family:

Publication number	Publication date	Application number	Application date
US2004199987 AA	20041014	US20030411536	20030410
US6907621 BB	20050621	US20030411536	20030410

Priority:

US20030411536 20030410

Probable Assignee: STEMEN ROBERT W

Assignee(s): (std): STEMEN ROBERT W

Inventor(s): (std): STEMEN ROBERT W

Agent(s): GIBBONS JON A; FLEIT KAIN GIBBONS GUTMAN BONGINI AND BIANCO PL; JON A

26) Family number: 31381858 (US2006017356A)

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Title: DEVICE AND METHOD FOR COVERING AND EXPOSING AN OBJECT

Abstract: A device for covering and exposing an object, such as a flat panel display device, can include a support structure movably attached to a display surface adjacent the object displayed on the display surface. A cover is attached to the support structure. The device includes a means for moving the support structure and cover for selectively covering and exposing the object. The means for moving the support structure and cover may be manually or electronically controlled, either directly or by remote control.

Classifications:

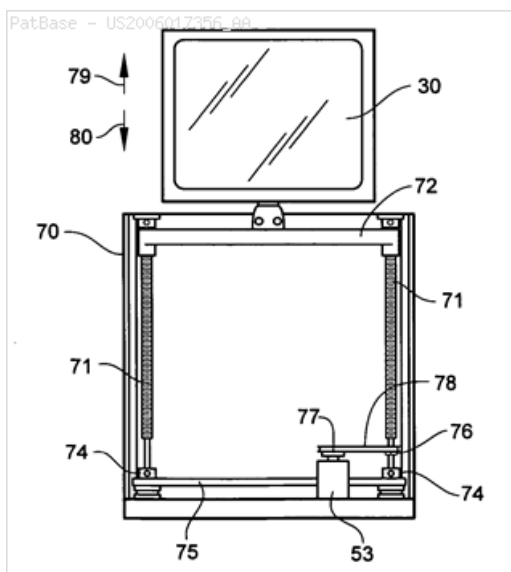
International (IPC 8-9): A47B51/00 A47B81/06 A47B88/00 A47B95/02 E04F13/00 G09F15/00 G09F9/00 (Advanced/Invention); A47B51/00 A47B81/00 A47B88/00 A47B95/00 E04F13/00 G09F15/00 G09F9/00 (Core/Invention)

International (IPC 1-7): A47B81/06 G09F9/00

CPC: A47B81/06 A47B2220/0013 G09F9/00 G09F15/00 A47B51/00 A47B81/064

European: A47B51/00 A47B81/06 A47B81/06A4 G09F15/00 G09F9/00 K47B220/00A4

US: 312/312 312/312P 312/319.7 312/319.700P



Family:

Publication number	Publication date	Application number	Application date
CH696885 A	20080115	CH20040000649	20040414
DE202004014028 U1	20041104	DE200420014028U	20040908
DE502005013011 D1	20121018	DE200550013011T	20050329

EP1734846 A1	20061227	EP20050716421	20050329
EP1734846 B1	20120815	EP20050716421	20050329
US2006017356 AA	20060126	US20050234659	20050922
US2006076860 AA	20060413	US20050288566	20051129
US2006170315 AA	20060803	US20050547851	20050901
WO05102107 A1	20051103	WO2005EP03261	20050329

Priority:

CH20040000649 20040414 CH20040064904 20040414 US20050547851 20050329
EP20050716421 20050329 WO2005EP03261 20050329 US20050547851 20050901
US20050234659 20050922 US20050288566 20051129

Probable Assignee: ART OVER TV AG

Assignee(s): (std): ART OVER TV AG ; HOSS DANIEL

Inventor(s): (std): HOSS DANIEL

Agent(s): GRUENECKER PATENT U RECHTSANWALTE PARTG MBB; GRUENECKER KINKELDEY STOCKMAIR AND SCHWANHAUESSER; J MICHAEL BOGGS KILPATRICK STOCKTON LLP; KILPATRICK STOCKTON LLP; J MICHAEL BOGGS, KILPATRICK STOCKTON; J MICHAEL BOGGS KILPATRICK STOCKTON

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

27) Family number: 31459233 (US2005005346A)

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Title: TOILET SEAT LIFTER

Abstract: A foot actuated toilet seat raising, lowering, and anti-slamming apparatus. Attaching to the wall behind the toilet is a base portion which is flexible so that it may be elevated enough to clean under. Fastened toward the front of the base portion is a decorative case having two sides which support two levers. The back end of the lower lever is pivotally coupled inside of the case while a foot pad is fastened to the front end of the lower lever. The lower lever arm is fastened with a flexible belt to one end of the upper lever arm so that downward force applied to the foot pedal is transferred to the upper lever arm thus causing the upper lever arm to rotate upward. The upper lever is pivotally coupled inside of the case and pivotally coupled to a push rod at the other end. The push rod is adjustable in length and attached at the upper end to a bracket. The bracket attaches to the toilet seat. A shock absorber is positioned inside of the case so that the upper lever will be cushioned in its downward rotation, thus keeping the toilet seat from slamming closed.

Classifications:

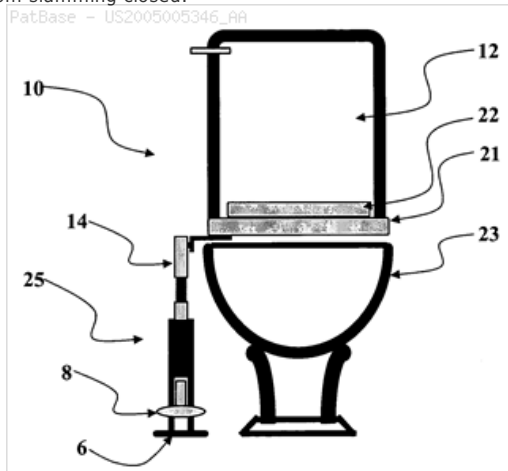
International (IPC 8-9): A47K13/10 (Advanced/Invention);
A47K13/10 (Core/Invention)

International (IPC 1-7): A47K13/10

CPC: A47K13/10

European: A47K13/10

US: 4/246.1



Family:

Publication number	Publication date	Application number	Application date
US2005005346 AA	20050113	US20040860045	20040601

Priority:

US20030486118P 20030711 US20040860045 20040601

Probable Assignee: EBERLE HAROLD RICHARD

Assignee(s): (std): EBERLE HAROLD RICHARD

Inventor(s): (std): EBERLE HAROLD RICHARD

Inventor(s): EBERLE HAROLD

Agent(s): HAROLD RICHARD EBERLE

28) Family number: 32392584 (US2005246827A)

© PatBase

Title: TOILET SEAT TILTING DEVICE

Abstract: A toilet seat tilting device includes a base, a seat tilting member, a cam member, a first lever, a second lever and a connecting rod. The base includes a cam bracket and a lever bracket. The cam member is pivotally attached to the cam bracket and includes a first arm and a second arm. The first lever and the second lever are pivotally attached to the lever bracket and include a pedal and an actuating arm. The connecting rod connects the cam member and the seat tilting member. When the first pedal is pressed the first actuating arm pivots the first arm of the cam member upward and the seat is tilted upward until the seat is fully pivoted upward, and the seat remains fully pivoted upward. The second pedal similarly operates to tilt the seat downward.

Classifications:

International (IPC 8-9): A47K13/10 (Advanced/Invention);

A47K13/10 (Core/Invention)
International (IPC 1-7): A47K13/10
CPC: A47K13/10
European: A47K13/10
US: 4/246.1 4/246.3 42/463 424/630

PatBase - US2005246827_AA

Patent Application Publication Nov. 10, 2005 Sheet 1 of 5 US 2005/0246827 A1

FIG. 1

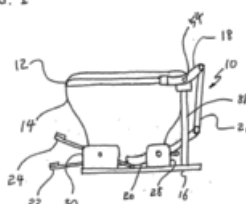
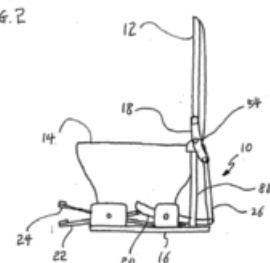


FIG. 2



Family:

Publication number	Publication date	Application number	Application date
US2005246827 AA	20051110	US20040838883	20040504
US7254846 BB	20070814	US20040838883	20040504
WO05107551 A2	20051117	WO2005US15480	20050504
WO05107551 A3	20060622	WO2005US15480	20050504

Priority:

US20040838883 20040504

Probable Assignee: JOO YOUNG HAN

Assignee(s): (std): JOO YOUNG HAN ; KIM MI AE ; YOUNG HAN JOO

Inventor(s): (std): JOO YOUNG HAN ; KIM MI A ; KIM MI AE

Inventor(s): KIM MI

Agent(s): PARK AND SUTTON LLP; JOHN K; PARK LAW FIRM

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

29) Family number: 32623178 (US2006031981A)

© PatBase

Title: HANDS FREE TOILET DEVICE

Abstract: A hands free toilet device 20 including mounting base 22; control assembly 30 for supplying a force for raising and lowering the standard seat 12; foot pressure actuator 50 for activating the control assembly 30; drive coupling 60; and lift assembly 70 for raising the standard seat 12 when the foot pressure actuator 50 is depressed and lowering the standard seat 12 when the foot pressure actuator 50 is released. A flush actuator 80 may be attached to the drive coupling 60 for automatically flushing the standard toilet 10 when the standard seat 12 is automatically lowered. A method for raising and lowering a standard seat 12 comprising the steps of stepping on the foot pressure actuator 50 to raise the standard seat 12; and releasing the foot from foot pressure actuator 50 to lower the standard seat 12 and flush the standard toilet 10.

Classifications:

International (IPC 8-9): A47K13/10 E03D5/00 (Advanced/Invention);

A47K13/10 E03D5/00 (Core/Invention)

CPC: A47K13/10 E03D5/04

European: A47K13/10 E03D5/04

US: 4/246.1

PatBase - US2006031981_AA



Family:

Publication number	Publication date	Application number	Application date
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Priority:

US20040916709 20040812

Probable Assignee: THOMPSON EUGENE W**Assignee(s):** (std): THOMPSON EUGENE W**Inventor(s):** (std): THOMPSON EUGENE W**Inventor(s):** THOMPSON EUGENE WESLEY ; THOMPSON EUGENE**Agent(s):** JAMES ADDISON BARRY JR**30) Family number: 34245545 (US2007044216A)**

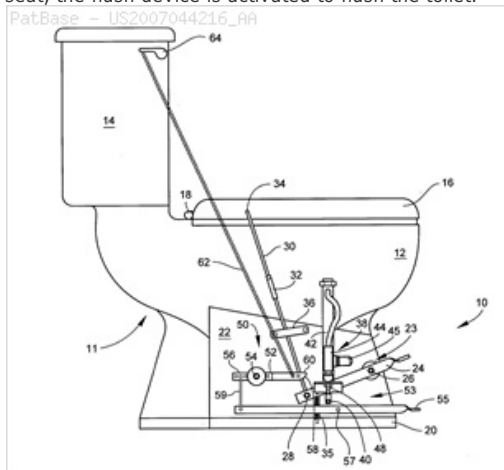
© PatBase

Title: TOILET SEAT LIFTING APPARATUS

Abstract: A toilet seat lifting mechanism is disclosed. The toilet seat lifting apparatus includes: a device for lifting a toilet seat of a commode from a lower position to an upper position; a device for lowering the toilet seat from the upper position to the lower position in a controlled manner (e.g., without slamming); and a device for flushing the commode. The flushing device is coupled to the lowering device. During lowering of the toilet seat, the flush device is activated to flush the toilet.

Classifications:**International (IPC 8-9):** A47K13/10 E03D5/04 (Advanced/Invention);

A47K13/10 E03D5/00 (Core/Invention)

CPC: A47K13/10 E03D5/08**European:** A47K13/10 E03D5/08**US:** 4/246.1 4/250**Family:**

Publication number	Publication date	Application number	Application date
US2007044216 AA	20070301	US20050213584	20050826

Priority:

US20050213584 20050826

Probable Assignee: COSBY RANDY K**Assignee(s):** (std): COSBY RANDY K**Inventor(s):** (std): COSBY RANDY K**Inventor(s):** COSBY RANDY ; COSBY RANDY KEITH**Agent(s):** HAMMER AND HANF PC**31) Family number: 34291865 (US2007056085A)**

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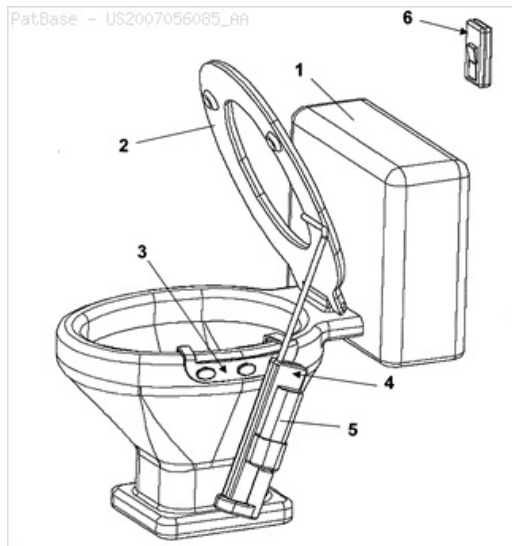
Title: POWERED, SIDE-ATTACHED TOILET SEAT LIFT

Abstract: The mechanism is a powered toilet seat lift that attaches to the side lip of a toilet and lifts the seat without modification to the toilet or seat. It consists of an attachment bracket, a linear actuator, a battery, and a remote control transmitter. An alternative to the linear actuator is a rotary actuator that pushes up the seat as it rotates from the front of the toilet to the back. An alternative to the battery is a cord connecting to the building electrical power supply.

Classifications:**International (IPC 8-9):** A47K13/10 (Advanced/Invention);

A47K13/10 (Core/Invention)

CPC: A47K13/10**European:** A47K13/10**US:** 4/246.1

**Family:**

Publication number	Publication date	Application number	Application date
US2007056085 AA	20070315	US20060517990	20060908

Priority:

US20050717440P 20050915 US20060517990 20060908

Probable Assignee: DYSON ROBERT E

Assignee(s): (std): DYSON ROBERT E ; SCHLAUCH ARTHUR C JR

Inventor(s): (std): DYSON ROBERT E ; SCHLAUCH ARTHUR C JR

Inventor(s): SCHLAUCH ARTHUR CHARLES ; SCHLAUCH ARTHUR CJR ; DYSON ROBERT EARL ; SCHLAUCH ARTHUR ; DYSON ROBERT

Agent(s): ARTHUR C SCHLAUCH JR

32) Family number: 34972535 (US7636956B)

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Title: HANDS FREE TOILET SEAT SYSTEM

Abstract: A toilet bowl has a front end, a rear end and sides. A toilet seat has a bore. The bore extends through the toilet seat from side to side. A base plate on the toilet bowl has a forward, rearward and a central bearing. An input shaft on the rearward bearing has a first gear, a second gear and an intermediate slip clutch. An output shaft on the forward bearing extends through the cylindrical bore. A third gear and a lifting arm are coupled to the toilet seat. An intermediate shaft on the central bearing has a fourth gear in contact with the second and third gears. A motor with a pinion is coupled to the first gear. A switch actuates the motor.

Classifications:

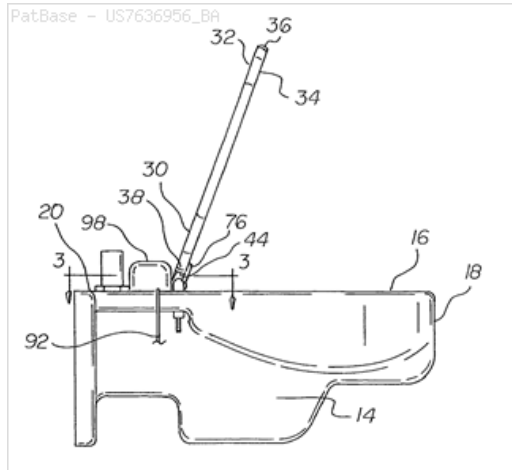
International (IPC 8-9): A47K13/10 (Advanced/Invention);

A47K13/10 (Core/Invention)

CPC: A47K13/10

European: A47K13/10

US: 4/246.1 4/246.5

**Family:**

Publication number	Publication date	Application number	Application date
CA2624181 AA	20080327	CA20072624181	20070119
CA2624181 C	20111122	CA20072624181	20070119
US7636956 BA	20091229	US20060340244	20060126
WO07089459 A2	20070809	WO2007US01511	20070119
WO07089459 A3	20071129	WO2007US01511	20070119

Priority:

US20060340244 20060126 WO2007US01511 20070119

Probable Assignee: DOUCET SHERYL

Assignee(s): (std): DOUCET SHERYL

Inventor(s): (std): DOUCET SHERYL

Agent(s): OGILVY RENAULT LLP SENCRL SRL; NORTON ROSE OR SENCRL SRL LLP; EDWARD P

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

33) Family number: 41777861 (US7367066B)

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Title: PIVOTALLY ADJUSTABLE TOILET LID

Abstract: A pivotally adjustable toilet lid lifting apparatus, comprising a base with spring resisted pedal, the pedal operating a substantially semicircular adjustably positioned pivot arm, the pivot arm connected to an adjustably removable and reversible actuation arm, the actuation arm removably and slideably engaging a toilet lid, whereby pedal pressure lifts the toilet lid and release of the pressure provides lid closure. The actuation arm is removable and reversible to provide for using the invention on either side of a toilet.

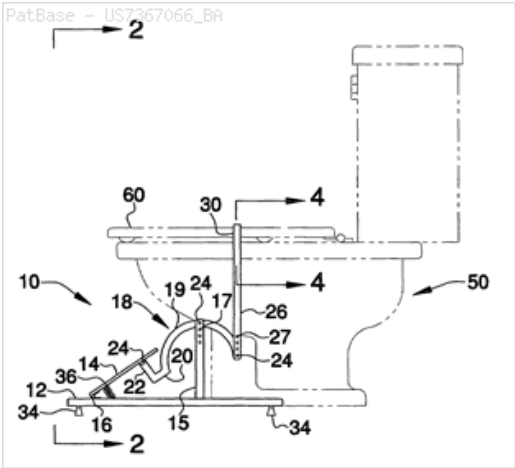
Classifications:

International (IPC 8-9): A47K13/10 (Advanced/Invention)

CPC: A47K13/10

European: A47K13/10

US: 4/246.1 42/461



Family:

Publication number	Publication date	Application number	Application date
US7367066 BA	20080506	US20050259930	20051028

Priority:

US20050259930 20051028

Probable Assignee:

REID DELROY A

Assignee(s): (std):

REID DELROY A

Inventor(s): (std):

REID DELROY A

34) Family number: 44220043 (US7644451B)

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Title: PEDAL OPERATED TOILET SEAT LIFTER AND RETURN

Abstract: An apparatus for selectively moving a toilet seat between a first and second position comprising: a base, a first pedal having a first end for receiving a downward force thereon pivotally connected to the base, a first means connected between the toilet seat and an end of the first pedal opposite the first end for moving the toilet seat from a first position to a second position, a second pedal having a first end for receiving a downward force thereon and pivotally connected at an edge opposite the first end to the first pedal, a second means connected between the second pedal and an upper end of the first moving means for moving at least one of the toilet seat from the second position to the first position and the second pedal away from the first pedal. Upon applying the downward force to the first end of the first pedal, the first pedal pivots and causes the first moving means to move the toilet seat from the first position to the second position and causes the second moving means to move the second pedal away from the first seat. Upon applying the downward force on the first end of the second pedal, the second moving means causes the toilet seat to be moved from the second position to the first position.

Classifications:

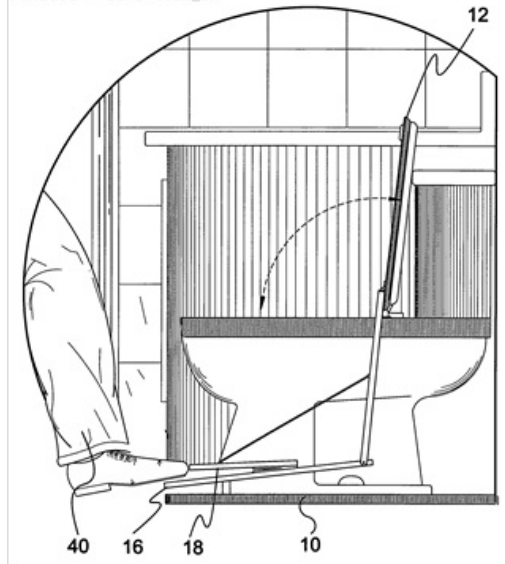
International (IPC 8-9): A47K13/10 (Advanced/Invention);

A47K13/10 (Core/Invention)

CPC: A47K13/10

European: A47K13/10

US: 4/246.1 4/246.3 4/248

**Family:**

Publication number	Publication date	Application number	Application date
US7644451 BA	20100112	US20050141067	20050531
US7987528 BA	20110802	US20080272778	20081117

Priority:

US20050141067 20050531 US20080272778 20081117

Probable Assignee:

ROSS MICHAEL D

Assignee(s): (std):

ROSS MICHAEL ; ROSS MICHAEL D

Inventor(s): (std):

ROSS MICHAEL D ; ROSS MICHAEL

Agent(s):

JOSEPH C; MEREK GROUP INC

35) Family number: 44229947 (US2010005580A)

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Title: HANDS-FREE TOILET SEAT LIFTING DEVICE

Abstract: In one aspect, the present invention is directed to a toilet seat lifting device (10), comprising a pneumatic system employing a piston (48) connected to the toilet seat (6), the system being adapted to lift the toilet seat (6) by applying mechanical force on the piston (48) in the corresponding direction (upwards, in the example herein), and to gradually lowering the toilet seat by gradually releasing air from the pneumatic system. The device may further comprise a valve (56), for causing a fall in air pressure in the pneumatic system, thereby causing an accelerated lowering of the toilet seat. The device may further comprise: a sensor, for sensing lowering of toilet seat (6); and a mechanism for activating flushing the toilet bowl upon detecting by the sensor that the seat has been lowered, such as a handle of a tap providing water to the flush tank (8) thereof.

Classifications:

International (IPC 8-9): A47K13/10 (Advanced/Invention);
A47K13/10 (Core/Invention)

CPC: A47K13/10

European: A47K13/10

US: 220/262 4/246.2 4/246.200P 4/246.3 4/250 4/313 4/408

**Family:**

Publication number	Publication date	Application number	Application date
IL197453 A1	20110131	IL20090197453	20090308
US2010005580 AA	20100114	US20090408701	20090322
US8020221 BB	20110920	US20090408701	20090322

Priority:

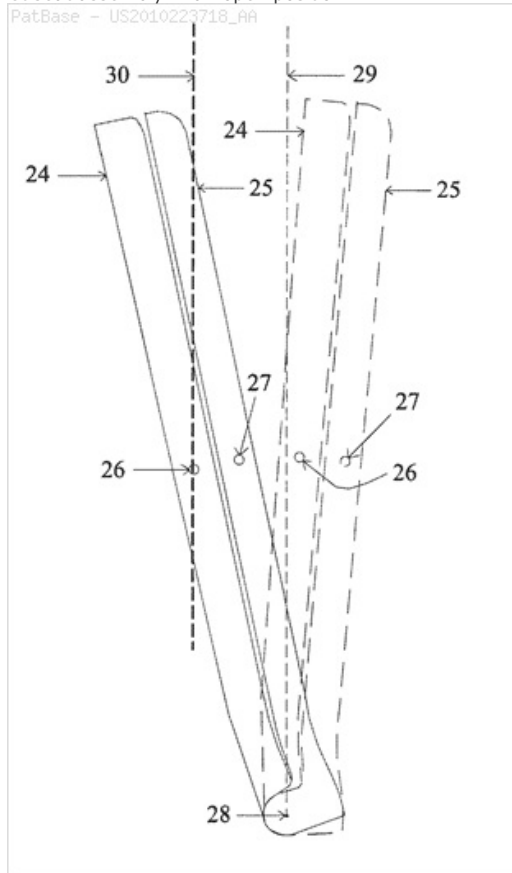
US20080080280P 20080714 US20090408701 20090322

Probable Assignee: BOROCHOV EREZ MR**Assignee(s):** (std): BOROCHOV EREZ ; GITELIS MEIR ; GITLIS MEIR**Assignee(s):** MEIR GITLIS ; BOROCHOV EREZ MR ; EREZ BOROCHOV**Inventor(s):** (std): BOROCHOV EREZ ; GITELIS MEIR ; GITLIS MEIR**Inventor(s):** MEIR GITLIS ; EREZ BOROCHOV**Agent(s):** DANIEL J SWIRSKY; HAIM**36) Family number: 46802275 (US2010223718A)**

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Title: AUTOMATIC TOILET SEAT ASSEMBLY CLOSING SYSTEM

Abstract: A closing apparatus is provided for automatically closing a toilet seat assembly adapted for mounting to a top ledge of a toilet bowl. Embodiments of the closing apparatus include an actuator for automatically rotating the toilet seat assembly between open and closed positions. The closing apparatus may also include one or more dampers for resisting the rotational movement of the toilet seat assembly so as to extend the closing rotation of the toilet seat assembly over a desired delay period. In other embodiments, the respective centers of gravity of a seat and a lid of the toilet seat assembly may be positioned with respect to a hinge axis of the toilet seat assembly in a manner that causes the seat or the seat and the lid to automatically close via gravitational torque when released in the open position. The closure apparatus may also include a simplified latch mechanism for selectively restraining the toilet seat assembly in an open position.

Classifications:**International (IPC 8-9):** A47K13/12 A47K13/14 (Advanced/Invention); A47K13/00 (Core/Invention)**CPC:** A47K13/10 A47K13/12**European:** A47K13/10 A47K13/12**US:** 4/240 4/242.1**Locarno class:** 42/40**Family:**

Publication number	Publication date	Application number	Application date
US2010223718 AA	20100909	US20100780458	20100514

Priority:

US20100323809P 20100413 US20100328522P 20100427 US20100780458 20100514

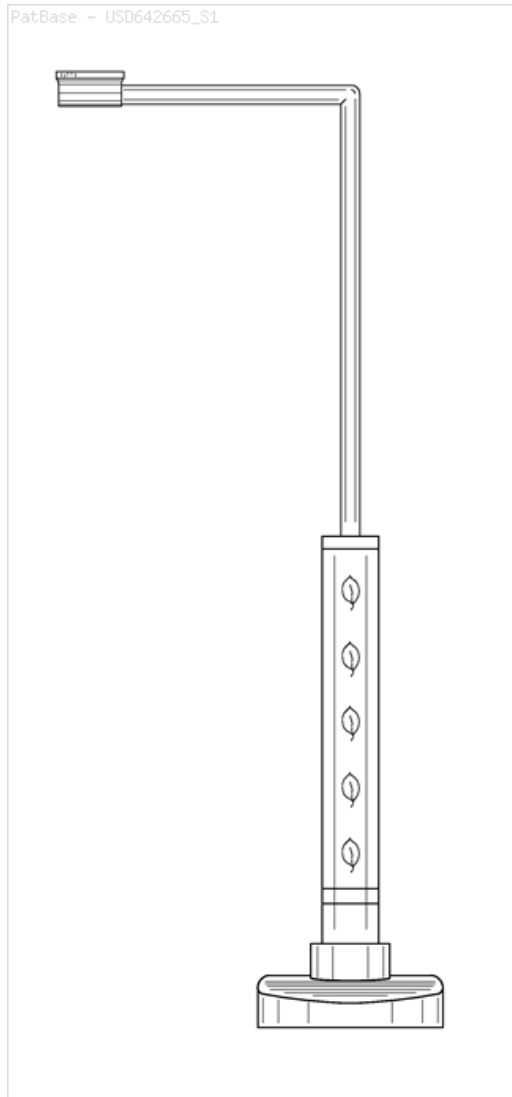
Probable Assignee: ANDERSEN ROBERT A**Assignee(s):** (std): ANDERSEN ROBERT A**Inventor(s):** (std): ANDERSEN ROBERT A**Agent(s):** MARSH FISCHMANN AND BREYFOGLE LLP**37) Family number: 49368227 (USD642665S)**

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Title: FOOT ACTUATED TOILET SEAT LIFTER

Abstract: The ornamental design for a foot actuated toilet seat lifter, as shown and described.

Classifications:**US:** D23/309**Locarno class:** 23/02

**Family:**

Publication number	Publication date	Application number	Application date
USD642665 S1	20110802	US20100363525F	20100610

Priority:

US20100363525F 20100610

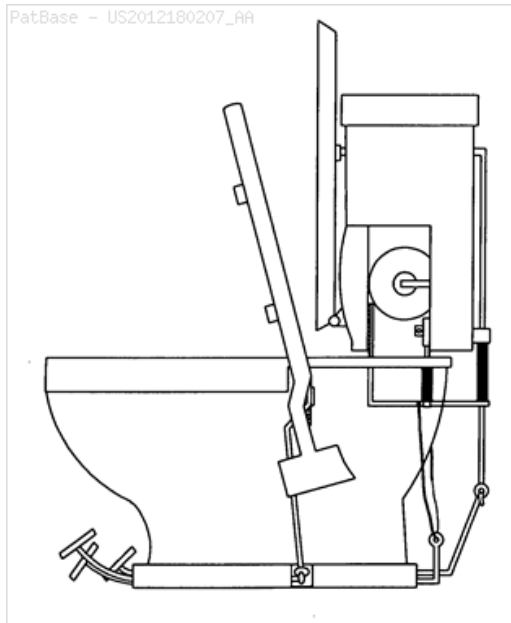
Probable Assignee: LITTLE HEIDI**Assignee(s):** (std): LITTLE HEIDI**Inventor(s):** (std): LITTLE HEIDI**Agent(s):** CROSSLEY PATENT LAW; MARK A**38) Family number: 51510198** (US2012180207A)

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Title: SANITARY TOILET

Abstract: The invention provides an Improved Sanitary Toilet bowl comprising a mechanism to lift the toilet seat. A depressable foot pedal connects to a rod which is connected to the lid of the toilet seat. When the pedal is depressed, the rod lifts and thus lifts the lid of the toilet seat.

Classifications:**International (IPC 8-9):** A47K13/10 (Advanced/Invention)**CPC:** A47K13/10**European:** A47K13/10**US:** 4/246.1 4/246.100P

**Family:**

Publication number	Publication date	Application number	Application date
US2012180207 AA	20120719	US20110373944	20111205
US8539617 BB	20130924	US20110373944	20111205

Priority:

US20100458943P 20101203 US20110373944 20111205

Probable Assignee: MURILLO WENCESLAO

Assignee(s): (std): MURILLO WENCESLAO

Inventor(s): (std): MURILLO WENCESLAO

Agent(s): RUTH

39) Family number: 56955452 (CN203815376U)

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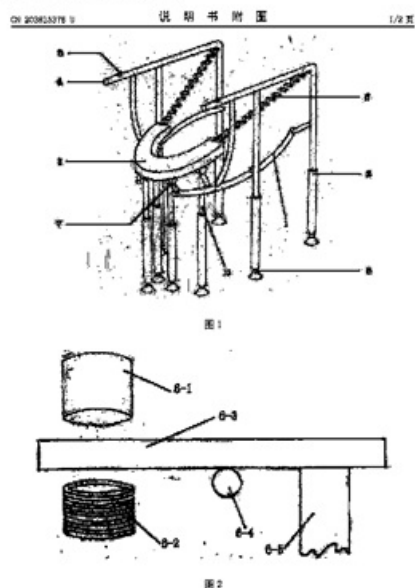
Title: AIR SPRING TYPE DEFECATION AID

Abstract: The utility model provides an air spring type defecation aid. The air spring type defecation aid comprises an overall framework, air springs, a closestool cover, a handrail, a lifting button and a first supporting leg, wherein the first supporting leg is connected under the handrail, the handrail is communicated with the first supporting leg, the air springs are connected with the first supporting leg and located under the first supporting leg, the overall framework is connected with the handrail and/or the first supporting leg, the lifting button is arranged on the handrail, and the closestool cover is arranged on the overall framework. The air springs buffer the squat of a user, the lifting button enables the use operation to be simpler and more convenient, the handrail is communicated with the first supporting leg so that one lifting button can simultaneously control the multiple air springs, the lifting amplitudes of the multiple air springs can be consistent, and therefore the closestool cover of the defecation aid can ascend and descend stably and fall on the same plane. The air spring type defecation aid is simple in designed structure, convenient to use, and capable of stably helping the user sit down and stand up, brings great convenience to the user and relieves the burden of a nurse.

Classifications:

International (IPC 8-9): A47K13/28 A47K17/02 (Advanced/Invention)

PatBase - CN203815376_U



Family:

Publication number	Publication date	Application number	Application date
CN103932633 A	20140723	CN201410189302	20140506
CN103932633 B	20151104	CN201410189302	20140506
CN203815376 U	20140910	CN201420228621U	20140506

Priority:

CN201410189302 20140506 CN201420228621U 20140506

Probable Assignee: UNIV NANJING MEDICAL

Assignee(s): (std): NANJING MEDICAL UNIV ; UNIV NANJING MEDICAL

Inventor(s): (std): DUAN LEI ; DUNHUANG JUNQIU ; LIU BIN ; LIU SHAOKAI ; TANG YIMIN ; WANG WEI ; WANG ZIHAO ; WU XIAOLING ; YUAN JIANCI ; ZHU SONGSHENG

40) Family number: 62228874 (US9326649B)

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Title: TOILET SEAT LIFTER-TOILET FOOT PEDAL SYSTEMS

Abstract: A specially designed toilet seat accessory that is operated via hydraulics and an integrated, electronic foot pedal to provide consumers a sanitary and convenient hands-free method of lifting and lowering the toilet seat.

Classifications:

International (IPC 8-9): A47K13/00 A47K13/10 (Advanced/Invention)

CPC: A47K13/10

US: 1/1

**Family:**

Publication number	Publication date	Application number	Application date
US9326649 BA	20160503	US20140530734	20141101

Priority:

US20130899271P 20131103 US20140530734 20141101

Probable Assignee: OPHORI DUKE

Assignee(s): (std): OPHORI DUKE

Inventor(s): (std): OPHORI DUKE

Agent(s): RACHEL; RG PATENT CONSULTING LLC