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## Pet litter enclosure with rolling internal compartment


### Abstract

The present invention comprises a pet litter enclosure including an enclosure box and a rolling internal compartment. The rolling internal compartment may include an opening, and the rolling internal compartment may roll inside the enclosure box. In operation, a litter box may be placed within the rolling internal compartment and may be rolled away from the enclosure box for cleaning and refilling purposes.



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## Background/Summary

FIELD OF THE INVENTION

(1) The present invention relates to a pet litter enclosure, more specifically to a pet litter enclosure with a rolling internal compartment.

BACKGROUND OF THE INVENTION

(2) Pet litter disposal is a constant hassle for pet owners. Owners must find an inconspicuous location for a litter box and must constantly be disposing of litter and refilling a litter box. The process of disposing of litter is messy and can lead to frequent spills.

(3) Some solutions exist which may hide a litter box within a small article of furniture, but these may require an owner to reach into a relatively small location to remove a litter box, and the litter box must still be carried some distance to be disposed. Spills may still occur with these solutions.

(4) There is a need for a pet litter enclosure which hides the litter box within the enclosure, and

allows for the litter box to be moved away from the enclosure for safe and fast disposal.

SUMMARY OF THE INVENTION

(5) In one of various examples, a pet litter enclosure may include an enclosure box and a rolling internal compartment. The enclosure box may include a left-side panel, a rear panel, a right-side panel and a top panel. The left-side panel may be coupled to the top panel and the rear panel and the right-side panel may be coupled to the top panel and the rear panel. The rolling internal compartment may include a left-side panel, a right-side panel, a rear panel, a bottom panel, a front panel and a plurality of wheels coupled to one or more of the left-side panel, right-side panel, rear panel and front panel. In addition, the left-side panel may be coupled to the bottom panel, the rear panel and the front panel, the right-side panel may be coupled to the bottom panel, the rear panel and the front panel, the bottom panel may be coupled to the rear panel and the front panel. The front panel may include an opening, and the rolling internal compartment may roll and may fit inside the enclosure box.

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## Description

BRIEF DESCRIPTION OF THE DRAWINGS

(1) FIG. **1** is a perspective view of one embodiment of the pet litter enclosure in a closed position.

(2) FIG. **2** is perspective view of one embodiment of the pet litter enclosure in a partially open position.

(3) FIG. **3** is a front perspective view of one embodiment of the pet litter enclosure.

(4) FIG. **4** is a perspective view of one embodiment of the rolling internal compartment

(5) FIG. **5** is a front perspective view of one embodiment of the pet litter enclosure with the rolling internal compartment removed.

DETAILED DESCRIPTION

(6) The following description includes specific details to provide an understanding of the present invention. Embodiments of the present invention described in the following description may be incorporated into other devices not disclosed in the following description. Structures and elements shown in the drawings are exemplary embodiments of the present invention and are not to be used to limit broader teachings of the present invention.

(7) It is understood through the text of this disclosure that where elements are described as separate functional units, those skilled in the art will recognize that various elements or portions thereof may be integrated together. Where elements are described in the following description as integrated together into a combined element, those skilled in the art will similarly recognize that individual elements of the combination may be utilized as separate elements.

(8) This specification includes references to “an embodiment of the present invention” or “one embodiment of the present invention”. This language is intended to refer to the particular elements and structures of the embodiment being discussed in that portion of the specification. Where references are made to “an embodiment of the present invention” or “one embodiment of the present invention” in other portions of the specification, those similarly refer to those particular elements and structures of the embodiment being discussed in that portion of the specification. Embodiments discussed in different portions of the specification may or may not refer to the same embodiment of the present invention.

(9) The use of specific terminology in the specification is used for best describing the present invention and shall not be construed as limiting. The terms “include”, “including”, “comprise” and “comprising” shall be understood to be open terminology and not limiting the listed items.

(10) FIG. **1** illustrates one embodiment of a pet litter enclosure **100** in a closed position. The pet litter enclosure may be comprised of an enclosure box and a rolling internal compartment.

(11) The enclosure box may include a top panel **130**, a left-side panel **110**, a right-side panel **111**

and a rear panel **160** . . . . For the purposes of this disclosure, directions are defined in reference to a viewer facing front panel **120**, such that panel **110** may be termed a left-side panel. Fasteners **115** and **116** may attach to internal support structures (not shown) on the inside of the enclosure box. Other fasteners may be included which are not specifically mentioned or illustrated.
(12) The enclosure box includes a rear panel not shown in this view of the pet litter enclosure.
(13) The rolling internal compartment may include a front panel **120**. An opening **125** may be included in front panel **120**. Opening **125** is illustrated in FIG. **1** as a square opening, but this is not intended to be limiting. Opening **125** may be a rectangular shape, a circular shape, or another shape not specifically mentioned.
(14) In operation, opening **125** may provide a path for a pet to access the inside of the rolling internal compartment.
(15) The height of front panel **120** may be less than the height of top panel **130**, such that stop panel **140** may fit at the top of front panel **120**.
(16) Support structure **151** may support top panel **130** and may couple left-side panel **110** to rear panel **160**. Support structure **152** may support top panel **130** and may couple left-side panel **110** to stop panel **140**. Support structure **153** may support top panel **130** may couple right-side panel **111** to stop panel **140**.
(17) FIG. **2** is perspective view of one embodiment of the pet litter enclosure **200** in a partially open position.
(18) Top panel **230** may form the top surface of the enclosure box. Right-side panel **201** may couple to top panel **230** and rear panel (not shown). Left-side panel **210** may couple to top panel **230** and rear panel (not shown).
(19) Fastener **215** may attach left-side panel **210** to stop panel **240**. A similar fastener (not shown) may attach right-side panel **201** to to stop panel **240**. Fastener **217** may attach right-side panel to right-side stop panel support **241**. Fastener **216** may attach left-side panel **210** to left-side stop panel support (not shown).
(20) Magnet **270** may hold front panel **220** in place when the rolling internal compartment is in the closed position.
(21) In operation, stop panel **240**, right-side stop panel support **241** and left-side stop panel support (not shown) may set a maximum internal position of the rolling internal compartment. Stop panel **240** may prevent the rolling internal compartment from rolling too far into the enclosure box and beyond the maximum internal position of the rolling internal compartment.
(22) The rolling internal compartment may include a front panel **220** and opening **225**. Opening **225** is illustrated in FIG. **2** as a square opening, but this is not intended to be limiting. Opening **225** may be a rectangular shape, a circular shape, or another shape not specifically mentioned.
(23) Opening **225** may provide a path for a pet to access the inside of the rolling internal compartment.
(24) The rolling internal compartment may include a left-side panel **251**, rear panel **252**, right-side panel **253** and bottom panel **250**. Left-side panel **251** may be coupled to front panel **220**, rear panel **252** and bottom panel **250** using a fastener, adhesive or other method. Right-side panel **253** may be coupled to front panel **220**, rear panel **252** and bottom panel **250** using a fastener, adhesive or other method. Bottom panel **250** may be coupled to front panel **220** and rear panel **252** using a fastener, adhesive or other method.
(25) The rolling internal compartment may include wheel **260**. Additional wheels may exist on the underside of bottom panel **250**.
(26) In operation, a litter box may be placed on bottom panel **250**. A pet may enter the litter box enclosure through opening **225**, make use of the litter box on bottom panel **250**, and may exit the litter box enclosure through opening **225**. In this manner, the litter box may be hidden from view.
(27) In operation, an owner may roll the rolling internal compartment away from the box enclosure and may remove the litter box on bottom panel **250** and may dispose of the contents.

(28) FIG. **3** is a front perspective view of one embodiment of the pet litter enclosure **300**.
(29) Front panel **320** may include opening **325**. Opening **325** is illustrated in FIG. **3** as a square opening, but this is not intended to be limiting. Opening **325** may be a rectangular shape, a circular shape, or another shape not specifically mentioned.
(30) Opening **325** may provide a path for a pet to access the inside of the rolling internal compartment.
(31) Stop panel **340** may a maximum internal position of front panel **320** when in a closed position. In operation, a pet may enter the litter box enclosure through opening **325**, make use of the litter box inside the litter box enclosure, and may exit the litter box enclosure through opening **325**. In this manner, the litter box may be hidden from view.
(32) FIG. **4** is a perspective view of one embodiment of the rolling internal compartment **400**.
(33) Rolling internal compartment **400** may include a rear panel **410**, a right-side panel **411**, a left-side panel **412**, a front panel **420** and bottom panel **450**. Rear panel **410** may be coupled to right-side panel **411**, left-side panel **412** and bottom panel **450**. Front panel **420** may be coupled to right-side panel **411**, left-side panel **412** and bottom panel **450**.
(34) Front panel **420** may be coupled to left-side panel **412** using bracket **426**, but this is not intended to be limiting. Front panel **420** may be coupled to left-side panel **412** using a different bracket, a fastener, adhesive or other method. Front panel **420** may be coupled to right-side panel **411** using bracket **427**, but this is not intended to be limiting. Front panel **420** may be coupled to right-side panel **411** using a different bracket, a fastener, adhesive or other method.
(35) Bottom panel **450** may be coupled to front panel **420**, left-side panel **412**, right-side panel **411** and rear panel **410**. Panels may be coupled using an adhesive, a fastener or another method not specifically mentioned.
(36) Front panel **420** may include opening **425**. Opening **425** is illustrated in FIG. **4** as a square opening, but this is not intended to be limiting. Opening **425** may be a rectangular shape, a circular shape, or another shape not specifically mentioned.
(37) Rolling internal compartment **400** may include wheel **462** and wheel **461**. Additional wheels (not shown) may be included on the underside of rolling internal compartment **400**.
(38) In operation, a litter box may be placed on bottom panel **450**.
(39) FIG. **5** is a front perspective view of one embodiment of the enclosure box **500** with the rolling internal compartment not shown.
(40) Left-side panel **510** may be coupled to top panel **530** and rear panel **550**. Left-side panel **510** may be coupled to top panel **530** and rear panel **550** using an adhesive, fastener or other method. Right-side panel **515** may be coupled to top panel **530** and rear panel **550**. Right-side panel **515** may be coupled to top panel **530** and rear panel **550** using an adhesive, fastener or other method. Rear panel **550** may be coupled to top panel **530**. Rear panel **550** may be coupled to top panel **530** using an adhesive, fastener or other method.
(41) Stop panel **540** may be coupled to left-side panel **510** and right-side panel **515**. Stop panel **540** may be coupled to left-side panel **510** and right-side panel **515** using an adhesive, fastener or other method. Right-side stop panel support **541** may be coupled to right-side panel **515**. Right-side stop panel support **541** may be coupled to right-side panel **515** using an adhesive, fastener or other method. Left-side stop panel support **542** may be coupled to left-side panel **510**. Left-side stop panel support **542** may be coupled to left-side panel **510** using an adhesive, fastener or other method.
(42) Left-side rail **552** may be coupled to left-side panel **510**. Right-side rail **551** may be coupled to right-side panel **515**. Left-side rail **552** may be coupled to left-side panel **510** using an adhesive, fastener or other method. Right-side rail **551** may be coupled to right-side panel **515** using an adhesive, fastener or other method.
(43) In operation, stop panel **540** may prevent the rolling internal compartment from rolling too far into enclosure box **500** and damaging enclosure box **500**. Right-side rail **551** and left-side rail **552**

may function as guides to direct the movement of the rolling internal compartment. Magnet **560** may hold the front panel of the rolling enclosure box in place when in a closed position.

## Claims

1. A pet litter enclosure comprising: an enclosure box comprising: a left-side panel, a rear panel, a right-side panel and a top panel; the left-side panel coupled to the top panel and the rear panel: the right-side panel coupled to the top panel and the rear panel: a rolling internal compartment comprising: a left-side panel, a right-side panel, a rear panel, a bottom panel, a front panel and a plurality of wheels coupled to one or more of the left-side panel, right-side panel, rear panel and front panel; the left-side panel coupled to the bottom panel, the rear panel and the front panel: the right-side panel coupled to the bottom panel, the rear panel and the front panel: the bottom panel coupled to the rear panel and the front panel: the front panel further comprising an opening, and the rolling internal compartment to roll and to fit inside the enclosure box.
2. The pet litter enclosure as claimed in claim 1, the enclosure box comprising a stop panel, the stop panel coupled to the left-side panel and the right-side panel, the stop panel to set the maximum internal position of the rolling internal compartment.
3. The pet litter enclosure as claimed in claim 2, the stop panel comprising a magnet.
4. The pet litter enclosure as claimed in claim 1, the bottom panel of the rolling internal compartment to support a removable litter box.
5. The pet litter enclosure as claimed in claim 1, the rolling internal compartment comprising 4 wheels coupled to the bottom panel, the wheels to respectively swivel 360 degrees.
6. The pet litter enclosure as claimed in claim 1, the opening comprising a square opening of at least 4 inches per side.
7. The pet litter enclosure as claimed in claim 1, the opening comprising a circular opening with a diameter of at least 6 inches.
8. The pet litter enclosure as claimed in claim 1, the left-side panel comprising a left-side rail to direct the movement of the rolling internal compartment inside the enclosure box.
9. The pet litter enclosure as claimed in claim 1, the right-side panel comprising a right-side rail to direct the movement of the rolling internal compartment inside the enclosure box.