PET DOOR PANEL

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ABSTRACT

An ornamental pet door panel which may be utilized in association with a conventional sliding glass or arca- dia type door having a normally covered opening to provide egress and ingress facilities for the family pet.

4 Claims, 3 Drawing Figures
PET DOOR PANEL

BACKGROUND OF THE INVENTION

This invention pertains to ornamental panels that may be installed in the door tracks of a conventional sliding glass door, the lower portion of which is provided with a small hinged panel to allow for ingress or egress of the family pet.

FIELD OF THE INVENTION

This invention is particularly directed to ornamental prefabricated panels which are provided with built-in pet door openings which panels may be temporarily or permanently installed in the door tracks of any width sliding glass door without alteration of the sliding glass door or its components.

DESCRIPTION OF THE PRIOR ART

Many types of doors have been utilized in the past to allow for the exit or entry of a pet such as a cat or dog from or into the room or other enclosure in which it has been installed without any attention on the part of the pet's owner. Such installations are usually crude and unsightly and are quite expensive due to the necessity of making extensive alterations to the wall or door in which they are installed.

Since most of the present day homes are provided with one or more sliding glass doors varying in width from 6 to 10 feet or more, a prefabricated panel containing a built-in pet door panel may be easily installed in the already existing door opening. This prefabricated panel may be fabricated of suitable materials, identical or similar to the frame of the door structure in which it is to be installed, and may contain a panel portion of wood, plastic or glass matching or blending with the decor of the surrounding walls of the room which serves as the pet or doggie door. This prefabricated panel may be quickly and easily installed in a door frame or removed therefrom to be used in another home with no installation costs.

SUMMARY OF THE INVENTION

It is, therefore, one object of this invention to provide a prefabricated pet door containing panel which may be installed in or removed from the sliding glass door tracks of a conventional sliding glass door with a minimum of effort.

Another object of this invention is to provide a new and improved framed panel structure containing a smaller hinged panel or doggie door which may be temporarily or permanently installed in the door tracks of a conventional sliding glass door.

A further object of this invention is to provide a detachably mountable prefabricated panel structure containing a separate hinged pet or doggie door panel at its lower end, both mounted in a common frame, which frame is detachably mountable in the frame of the sliding door with which it cooperates to close the door opening.

A still further object of this invention is to provide a prefabricated dual panel structure having a smaller hinged panel adjacent its lower end and a larger stationary panel which extends upwardly from the hinged panel to the top of a frame which surrounds both panels. The lower hinged panel provides a covered access opening for pets and the upper stationary panel provides a transparent decorative closure means, said prefabricated dual panel structure being quickly and easily installed in the door tracks of any conventional sliding glass door.

Further objects and advantages of the invention will become apparent as the following description proceeds and the features of novelty which characterize the invention will be pointed out with particularity in the claims annexed to and forming a part of this specification.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention may be more readily described by reference to the accompanying drawings, in which:

Fig. 1 is a perspective view of a corner of a room showing a typical sliding glass door installation with the pet door panel of this invention installed therein.

Fig. 2 is a vertical sectional view taken on the line 2—2 of Fig. 1 through the assembled pet panel of the invention illustrating its association with the frame or door tracks of a typical sliding glass door within which it is installed; and

Fig. 3 is an enlarged fragmentary vertical sectional view through the hinged lower portion of the assembled pet door panel.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring more particularly to the drawing by characters of reference, Fig. 1 discloses a typical sliding glass door 10 installed in an outside wall of a room or other enclosed area of a building having a prefabricated panel structure 11 employing a pet or doggie door installed in typical relationship therein.

The typical sliding glass door structure prefabricated in a factory and brought to the building site for installation usually comprises an extruded aluminum frame 12 having a header portion 13, a sill portion 14 and jamb portions 15 and 16 which are sized, assembled and installed in the wall opening provided for the door. Each of the frame portions are provided with adjacent recessed and aligned outside and inside track portions 17 and 18 which are adapted to receive the frame portions 19 of one or more fixed glass panels 20 in one of the tracks and to receive, in sliding relation, the frame portions 21 of the sliding glass door panel 22 in the adjacent track.

It should be noted that the typical sliding glass door panel 22 usually includes a suitable lock mechanism 23 mounted on the frame portion 21 which contacts with a latch member (not shown) mounted on the jamb portion 16 of the frame 12. After installation of the prefabricated panel structure 11 in the opening created by the partially opened sliding glass door panel 22, the lock mechanism will contact and be secured in a latch member (not shown) which is mounted in the frame of the panel structure 11 when the sliding door panel is fully closed, as shown in Fig. 1.

It should be noted that in order to install the sliding glass door panel 22 in the inside door track portions 18 of the header portion 13 and the sill portion 14 of frame 12, it is necessary that the overall height of the sliding door panel 22 including its frame portions 21 be less than the distance between the bottom and top inner surfaces of the respective header portion 13 and sill portion 14. As well known in the art, the sliding door frame 21 is provided with retractable spring actuated rollers or other spring biasing means that permit
the sliding glass door panel 22 to be forced to the bottom of the sill track recessed portion 18 to allow the edge of the top frame portion 21 of door panel 22 to clear the depending edges or projections 24 of header portion 13. Thus, the header frame portion 21 of the door may be moved into the upper track portion or recess 18 of the frame 12 and be confined between the depending projections 24 which form the door track in which it slides.

The prefabricated panel structure 11 comprising the pet or doggie door of this invention is preferably installed in the door tracks 18 in a similar manner as the sliding glass door panel 22 described above. It may be removed from the tracks by simply opening the sliding door slightly and reversing the installation procedure, as will be further explained.

The prefabricated panel structure 11, like the fixed glass panel 20 and the sliding glass door panel 22, comprises a frame member 25 which is similar in design to the frame members 19 and 21 of the fixed and sliding door panels comprising upright portions 25A and 25B and sill and header portions 25C and 25D. It is sized to present the same sight line after installation in the sliding door tracks 18 as the frames 19 and 21 of the fixed panel 20 and sliding door panel 22. The width of frame 25 and hence the prefabricated panel structure 11 may vary according to the width of the door opening in which it is to be installed. The pet or doggie door, however, may be formed to fit the size of the pet or pets using the facility and comprises a lower hinged panel 26 and an upper or fixed panel 27 corresponding to width of frame member 25 which completely surrounds the two panels, as shown in FIG. 1. The overall height of the panel assembly 11 should be approximately the same as the overall height of the sliding glass door assembly 22. The bottom edge of the sill portion of frame member 25 is preferably provided with two or more flat springs 28, as shown in FIGS. 2 and 3, so that the assembled panel can easily be inserted or removed from the door tracks 18 by using the same procedure as described in the preceding paragraphs relative to installation or removal of the sliding glass door panel 22.

The upper or fixed panel 27 may be made of wood, plastic or glass and if made of wood or plastic may be finished to match or coordinate with the finish of the surrounding walls. It is removable secured in the upper portion of frame 25 by a transverse tie bar 29 which is provided with a groove containing a soft, flexible rubber or vinyl strip 30 for securing the panel in the frame. Similar strips 30' are used in the groove receiving surface of the lower transverse portion of frame 25. Additionally, a transverse plastic or metal T-shaped threshold plate member 31 is inserted in strips 30' in the top depression of the sill portion of frame 25, as shown in FIG. 3.

The lower hinged panel 26 may be fabricated of wood, plastic or fiberglass and finished to coordinate with the upper panel 27 and the surrounding walls of the room. Panel 26 is provided at its top outer end with a flexible rubber or vinyl hinge member 32 which extends across the top outer face of the panel and is secured thereto by means of rivets 33. The extending end of the hinge member is caused to abut the flat bottom end of the transverse tie bar 29 to which it is removably secured by means of sheet metal screws 34. Hinge member 32 causes panel 26 to swing in or out of opening 35 provided between the inner edges of the sides of frame members 25 and the threshold plate member 31 and the underside edge of the transverse tie bar 29, whenever light pressure is applied to either side of the panel by the pet to exit or gain entry into the room.

It should be noted that although no means for weatherproofing the necessary clearance opening between the side and bottom edges of the hinged panel 26 and the sides and bottom of the opening 35 in which it swings are shown in the drawing, it is readily conceivable that the side and bottom edges of the panel could be provided with flexible rubber of vinyl weatherstrip (not shown) which would perform this function and still allow the hinged panel 26 to be easily pushed in either direction through the opening by the pet.

It should be noted that at least the top of the sill of frame 25 may be formed of resilient material such as hard rubber so that panel 26 may rub across its upper surface during the arcuate movement of panel 26 offering some resistance to its movement so that the door formed by panel 26 normally remains closed.

Further, a slide bolt latch 36 may be attached to panel 26 on the inside of the room and engages a hole in upright portion 25B to receive the panel, if so desired.

Although but one embodiment of the invention has been shown and described, it will be apparent to those skilled in the art that various changes and modifications may be made therein without departing from the spirit of the invention or from the scope of the appended claims.

What is claimed is:

1. A prefabricated panel for fitting in the tracks of an arcadia type door frame employing a pet door comprising:
a rectangular frame slightly less than the height of an arcadia type door frame comprising a pair of upright portions and sill and header portions arranged across their ends, spring biasing means mounted on said sill and header portions for holding said rectangular frame tightly in the tracks of said arcadia type door frame, a tie bar transversely arranged between said upright portions of said rectangular frame for dividing said rectangular frame into top and bottom vertically positioned openings, a fixed panel mounted in said top opening, and a movably mounted panel positioned in said bottom opening forming a pet door, said movably mounted panel being hingedly fastened to said tie bar for arcuately moving out of the planes of said rectangular frame either side of its upright position in said arcadia type door frame when pushed by a pet, a threshold plate fixedly positioned in said sill portion of said rectangular frame for cooperating with said movably mounted panel when in its vertical position for closing said bottom opening, said tie bar and said sill portion of said rectangular frame comprising grooves along their upper surfaces, resilient strips of material positioned in said grooves, said fixed panel being fixedly positioned on said resilient strip in said groove in said tie bar, and said resilient strip in said groove in said sill portion supporting said threshold plate.

2. The prefabricated panel set forth in claim 1 in further combination with:
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said movably mounted panel being hingedly fastened to said tie bar by a hinge means comprising a resilient member interconnecting said tie bar and said movably mounted panel.

3. The prefabricated panel set forth in claim 1 wherein:

said grooves are U-shaped.

4. The prefabricated panel set forth in claim 1 wherein:

the top of said sill portion is formed of resilient material.

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