Jan. 29, 1963 C. F. PETKWITZ 3,075,258

DOMESTIC APPLIANCE

Filed Aug. 12, 1959

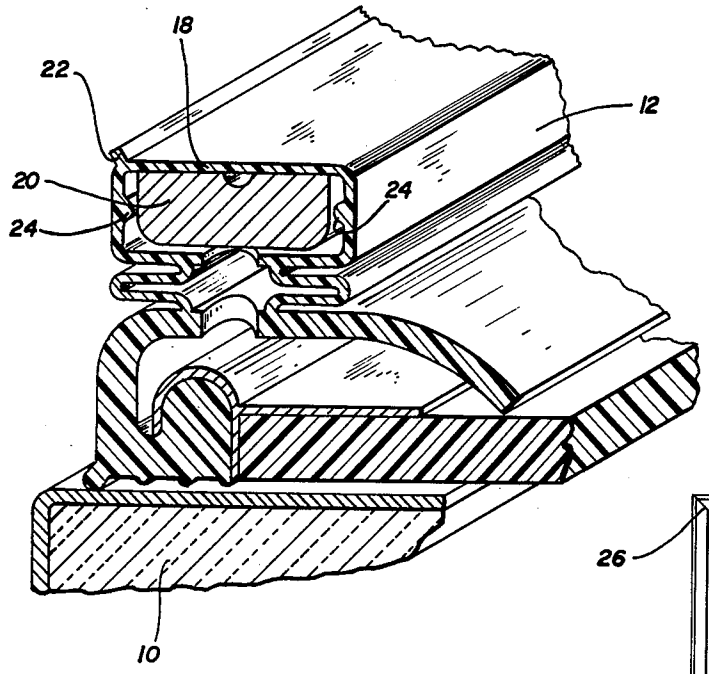


FIG. 1

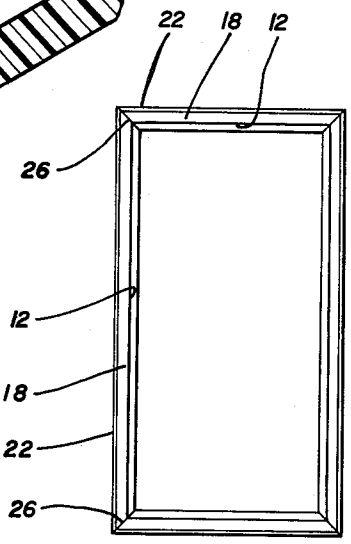


FIG. 2

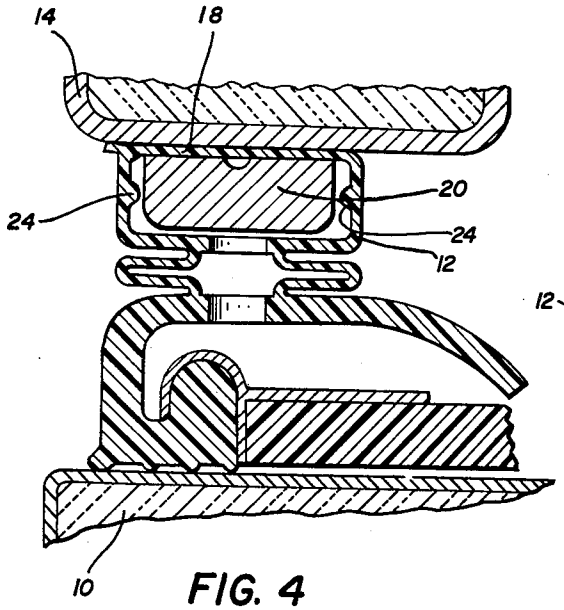


FIG. 4

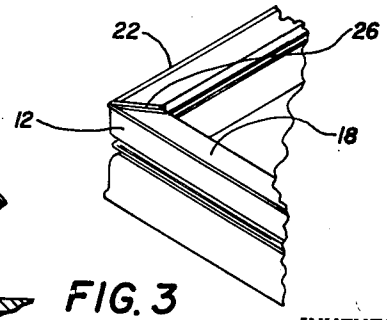


FIG. 3

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DOMESTIC APPLIANCE

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1 Claim. (Cl. 20—69)

This invention relates to refrigerating apparatus and more particularly to an improved door seal construction for use in refrigerators and the like.

One of the big problems in making a good door seal is that of making good mitered joints in the door seal at the corners of the door opening. This problem is especially pronounced in modern magnetic type door seals wherein the wall thickness of the bulb portion of the seal is on the order of .015 inch. During vulcanizing the adjacent mitered edges of thin material of this type, a certain amount of flash forms and due to the thinness of the wall of the bulb portion of the seal, it is not practical to buff or sand the mitered joint to remove the flash. This flash interferes with the proper sealing of the seal. It is an object of this invention to provide a thin walled seal of the magnetic type with an added rib adjacent the outer edge of the bulb which does not increase the thickness of the material between the magnet and the metallic door jamb but which normally projects forwardly from the face of the seal in the door open position a distance substantially equal to the distance which the flash formed at the mitered joint projects.

It is an object of this invention to provide the thin wall of a door seal bulb with an extra sealing rib located adjacent the outer edge of the door seal and located beyond the edge of a longitudinally extending bar magnet placed in the bulb portion of the seal.

Another object of this invention is to provide a magnetically operated door seal with an extra sealing rib which does not interfere with the movement of the magnet part of the seal towards the adjacent door frame.

More particularly it is an object of this invention to provide a thin wall door seal bulb of the type wherein a magnet is placed within the bulb with an extra sealing rib which is offset from the face of the magnet and which projects from the bulb in an area where an air space or void is provided beneath the rib so that when the door seal moves into sealing engagement, the projecting rib can readily distort the wall of the bulb so as not to interfere with the magnet moving against the face of the cabinet.

Further objects and advantages of the present invention will be apparent from the following description, reference being had to the accompanying drawing wherein preferred embodiments of the present invention are clearly shown.

In the drawing:

FIGURE 1 is a fragmentary perspective view showing a door seal embodying the invention.

FIGURE 2 is a plan view showing the door seal fastened to the door.

FIGURE 3 is a fragmentary perspective view showing the mitered corner of a door seal embodying the invention.

FIGURE 4 is a fragmentary sectional view showing the seal when the door is in the closed position.

Referring now to the drawing, wherein a preferred embodiment of the invention has been shown, reference numeral 10 designates a refrigerator door to which there is attached a door seal strip 12 for sealing engagement with the metallic outer shell portion of a refrigerator cabinet 14. The door seal is in the form of an extruded plastic element which is made of rubber or other suitable material such as a vinyl compound having a cross section of the shape shown in FIGURE 1. A magnet 20 is provided in the bulb portion of the seal and serves as the sole means for holding the door closed. The outer wall 18 of the bulb portion of the door seal is made of thin flat material which is approximately .015 inch thick. It is essential that this be thin so as not to materially interfere with the spacing between the magnet 20 placed within the door seal bulb and the mating face of the steel refrigerator cabinet 14. The magnet 20 is of the well known type wherein metallic particles embedded in the strip of plastic have been magnetized so as to form north and south poles adjacent opposite edges of the magnet which cause the magnet to hold the door in the closed position due to the magnetic attraction between the magnet 20 and the metallic outer shell of the refrigerator cabinet 14 in accordance with well known practice. Magnets of this type and door seals of this general type are very old and the novelty herein resides in providing an extra sealing lip 22 adjacent the outer edge or corner of the door seal. This sealing lip extends the full length of the door seal and is formed during the original extruding process. The thickness of the lip is approximately .015 inch and it extends forwardly from the face of the seal approximately .015 inch. It will be noted that the inner walls of the sealing bulb are provided with ribs 24 which serve to center the magnetic bar element 20 within the door seal bulb. It will also be noted that the extra sealing rib 22 is formed at a point beyond the edge of the magnet 20 where an air space or void exists beneath the rib so that the rib does not increase the distance between the face of the magnet 20 and the face of the cabinet 14. The distance which the rib 22 projects forwardly from the face of the seal is substantially equal to the height of the flashing 26 which is formed at the mitered joint at each corner of the door seal strip.

While the embodiments of the present invention as herein disclosed, constitute preferred forms, it is to be understood that other forms might be adopted.

What is claimed is as follows:

A flexible gasket having an elongated recess therein, one wall of said recess being substantially flat and having a thickness of approximately .015 inch, a magnet means within said recess, means for spacing said magnet means from one inner side wall of said recess whereby a void is formed in said gasket adjacent one edge of said magnet means, said means comprising a rib projecting from the inner wall of said recess, and a second rib formed on said gasket and projecting forwardly from the main face of said gasket along a line directly opposite said void.

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