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(54) **Protective buffer used in the packages of household appliances with legs**

Schutzpuffer zur Verwendung in der Verpackung von Haushaltsgeräten mit Beinen

Tampon protecteur utilisé dans les emballages d'appareils domestiques ayant des pieds

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Description

[0001] The present invention relates to protective buffers which prevent the household appliances from being damaged during transportation, and particularly relates to protective buffers which are used in the packaging of household appliances with legs and which are placed at least to a lateral surface of the household appliance.

KNOWN STATE OF THE ART

[0002] As known, after the production of household appliances is completed, they are packaged and they are delivered to the customers. Packaging processes are generally realized by placing impact preventers to the lateral and upper sides of the household appliances, where said impact preventers are made of styropor foam material. Afterwards, the styropors are wrapped by transparent nylons and the household appliances are placed into carton boxes and they are ready for transportation. In the present art, styropors do not wrap the legs completely, in order for the legs not to be damaged; the transportation of such household appliances is realized without the legs assembled. Ovens with legs (in the related technical field, they are called Italian legged ovens) can be given as an example to such household appliances. Accordingly, the assembly of said legs is realized at delivery points generally like the houses of the customers by the technical service staff of the manufacturer company. However, in this case, the manufacturer company has to provide an additional service to the customers.

[0003] In the present art, there are protective packaging members comprising parts where some household appliances' legs can be placed. For instance, in the patent application JP10072081, a protecting apparatus is disclosed which is made of polyester and which has a seating surface where the legs seat onto on the bottom part and which has rear and lateral surfaces. In the patent application JP9156680, a base surface, four angled surfaces on all of the edges of said base surface and holes where the legs will seat on the corner edges are disclosed.

[0004] In prior art document US 2007/0131147 A1 a protective buffer for protecting household appliances' legs during transportation is disclosed. This protective buffer comprises an elongated portion extending from the household appliance base towards the ground along the legs, and leg housings which are embodied on said elongated portion and wherein the legs are placed. Said leg housings are openings in the elongated portion giving clearance for the legs of the household appliances. However, to place the legs into the leg housings it is necessary to elevate the household appliances.

BRIEF DESCRIPTION OF THE INVENTION

[0005] An object of the subject matter invention is to provide a protective buffer which prevents the damaging

of the legs during the transportation of household appliances with legs, and which can be easily placed to the legs of the household appliances and when desired, can be easily removed.

[0006] Another object of the subject matter invention is to provide a protective buffer which eliminates the need for packaging the household appliance and the legs thereof separately and which thus shortens the production process.

[0007] In order to realize the abovementioned objects and all of the objects obtained from the detailed description below, the present invention is a protective buffer which is used in the packaging of household appliances with legs and which is placed at least to a lateral surface of the household appliance, the protective buffer comprising an elongated portion extending from the household appliance base towards the ground along the legs, and leg housings which are embodied on said elongated portion and wherein the legs are placed, characterized in that said leg housings comprise an open surface which provides the household appliance's legs to be placed laterally inside.

[0008] In another preferred embodiment of the present invention, said leg housings comprise an open surface which provides the household appliance's legs to be placed laterally inside.

[0009] In another preferred embodiment of the present invention, said household appliance comprises a couple of front legs and a couple of rear legs which are connected to each other by means of a leg fixation sheet.

[0010] In another preferred embodiment of the present invention, there are two leg housings which are formed at two ends of the elongated portion and wherein a front leg and a rear leg are placed.

[0011] In another preferred embodiment of the present invention, it is made of foam based material and it is preferably styropor foam.

[0012] In order for the additional characteristics and advantages of the subject matter invention to be understood in the best manner, it has to be evaluated with the accompanied figures whose description is given below.

BRIEF DESCRIPTION OF THE FIGURES

[0013] The oven realized in order to achieve the object of the subject matter invention is illustrated in the annexed figures, from these figures;

In Figure 1, the frontal view of an oven is given.

In Figure 2, the general view of the subject matter protective buffer is given.

In Figure 3, the detailed view of the subject matter solution illustrated in Figure 4 is given.

In Figure 4, the protective buffer illustrated in Figure 2 is given, where the leg fixation sheet at the bottom part of ovens is assembled.

THE DETAILED DESCRIPTION OF THE INVENTION

[0014] In this detailed explanation, the subject matter invention is explained with references to figures without forming any restrictive effect in order to make the subject more understandable. Accordingly, in the detailed description below, the subject matter invention is assumed to be applied to an oven (10) and particularly it is assumed to be applied to the ovens (10) with legs which are called Italian legged ovens. However, with minor revisions, the subject matter invention can also be applied to packages of household or industrial type white goods with different properties.

[0015] With reference to Figure 1 or 2, the subject matter protective buffer (20) is placed onto the mutual lateral surfaces of the oven (10). Said oven (10) comprises a couple of front legs (12) and a couple of rear legs (12) which are connected to each other by means of one each leg fixation sheets (11) which are assembled to the front and rear part of the base.

[0016] As an improvement of the subject matter invention, the protective buffer (20) comprises an elongated portion (21) extending towards the ground along the legs (12) of the oven. On two sides of the elongated portion (21), there are a couple of leg housings (22) wherein the legs (12) of the oven are placed. In this embodiment of the subject matter invention, said elongated portion (21) has the same width as the protective buffer (20), in alternative embodiments, it can be embodied as two separate extensions comprising the leg extensions (22) thereon. In another alternative embodiment, an additional protector can be used instead of said elongated portion (21) separately from the protective buffer.

[0017] With reference to Figure 3 and 4, said leg housings (22) comprise two closed surfaces on the lateral sides, which are compliant with the form of the oven legs (12) and in the front part thereof, said leg housings (22) comprise an open surface (221) which provides the oven legs (12) to be placed laterally. By means of the open surface (221), the oven legs (12) can be easily placed laterally to the leg housings (22) and when desired, they can be removed. The upper corners of the lateral surfaces of the leg housing (22) are in the form of an angled surface which is formed by the cutting of the surface.

[0018] As a result, by means of the provided invention, when the oven (10) legs (12) are impacted accidentally during carriage, the bending of the legs is prevented and it supports and protects the oven (10) against the impacts coming from the lateral side or the bottom side. Moreover, when the oven (10) is impacted accidentally, the lateral covers are protected in a better manner when compared with the present styropors, since the protective buffer (20) does not contact with the lateral panels.

[0019] In alternative applications of the subject matter invention, the leg housing (22) may have different forms. For instance, it may have a structure so as not to damage the oven (10) legs (12) or it may have the same function, and it may have a form so as to wrap the legs (12) from

lateral sides from bottom or from certain points of the legs (12).

[0020] In addition to the abovementioned details, the subject matter protective buffer is preferably a styropor which is made of foam based material. In alternative embodiments, instead of foam, the subject matter invention can be made of carton, foam rubber or any material with soft surface which will function as a buffer.

[0021] The protection scope of the present invention is set forth in the annexed Claims and cannot be restricted to the illustrative disclosures given above, under the detailed description. It is because a person skilled in the relevant art can obviously produce similar embodiments under the light of the foregoing disclosures, without departing from the main principles of the present invention.

REFERENCE NUMBERS

[0022]

10	Oven
11	Leg fixation sheet
12	Oven leg
20	Protective buffer
21	Elongated portion
22	Leg housing
221	Open surface

Claims

1. A protective buffer (20) which is used in the packaging of household appliances with legs (12) and which is placed at least to a lateral surface of the household appliance, the protective buffer (20) comprising an elongated portion (21) extending from the household appliance base towards the ground along the legs (12), and leg housings (22) which are embodied on said elongated portion (21) and wherein the legs (12) are placed, **characterized in that** said leg housings (22) comprise an open surface (221) which provides the household appliance's legs (12) to be placed laterally inside.
2. A protective buffer (20) according to claim 1, wherein said household appliance is an oven (10) comprising a couple of front legs (12) and a couple of rear legs (12) which are connected to each other by means of a leg fixation sheet (11).
3. A protective buffer (20) according to claim 2, wherein two leg housings (22) are provided which are formed

at two ends of the elongated portion (21) and wherein a front leg (12) and a rear leg (12) are placed.

4. A protective buffer (20) according to any of the preceding claims, wherein it is made of foam based material.
5. A protective buffer (20) according to claim 4, wherein it is a styropor foam.

Patentansprüche

1. Schutzpuffer (20) zur Verwendung in der Verpackung von Haushaltsgeräten mit Beinen (12), der mindestens an eine seitliche Fläche des Haushaltsgeräts platziert ist und einen länglichen Abschnitt (21), der sich von der Haushaltsgerätebasis zum Boden entlang den Beinen (12) erstreckt, und Beingehäuse (22) umfasst, die am länglichen Abschnitt (21) ausgebildet sind und in die die Beine (12) platziert sind, **dadurch gekennzeichnet, dass** die Beingehäuse (22) eine offene Fläche (221) umfassen, die erlaubt, dass die Beine (12) des Haushaltsgeräts seitlich hinein platziert werden können.
2. Schutzpuffer (20) nach Anspruch 1, wobei das Haushaltsgerät ein Ofen (10) mit zwei vorderen Beinen (12) und zwei hinteren Beinen (12) ist, die mittels eines Beinbefestigungsblechs (11) miteinander verbunden sind.
3. Schutzpuffer (20) nach Anspruch 2, wobei zwei Beingehäuse (22) vorgesehen sind, die an zwei Enden des länglichen Abschnitts (21) ausgebildet sind und in die ein vorderes Bein (12) und ein hinteres Bein (12) platziert sind.
4. Schutzpuffer (20) nach einem der vorhergehenden Ansprüche, wobei er aus einem Material auf Schaumstoffbasis hergestellt ist.
5. Schutzpuffer (20) nach Anspruch 4, wobei er ein Styropor-Schaumstoff ist.

Revendications

1. Tampon protecteur (20) qui est utilisé dans l'emballage d'appareils électroménagers avec des pieds (12) et qui est placé au moins sur une surface latérale de l'appareil électroménager, le tampon protecteur (20) comprenant une partie allongée (21) s'étendant à partir de la base de l'appareil électroménager vers le sol le long des pieds (12), et des logements (22) de pied qui sont intégrés sur ladite partie allongée (21) et dans lesquels les pieds (12) sont placés, **caractérisé en ce que** lesdits logements (22) de pied

comprennent une surface ouverte (221) qui permet que les pieds (12) de l'appareil électroménager soient placés latéralement à l'intérieur.

2. Tampon protecteur (20) selon la revendication 1, dans lequel l'appareil électroménager est un four (10) comprenant un couple de pieds (12) avant et un couple de pieds (12) arrière qui sont connectés les uns aux autres au moyen d'une tôle de fixation (11) de pieds.
3. Tampon protecteur (20) selon la revendication 3, dans lequel deux logements (22) de pied sont prévus, qui sont formés à deux extrémités de la partie allongée (21) et dans lequel un pied (12) avant et un pied (12) arrière sont placés.
4. Tampon protecteur (20) selon l'une quelconque des revendications précédentes, dans lequel il est constitué d'un matériau à base de mousse.
5. Tampon protecteur (20) selon la revendication 5, dans lequel il s'agit d'une mousse Styropor.

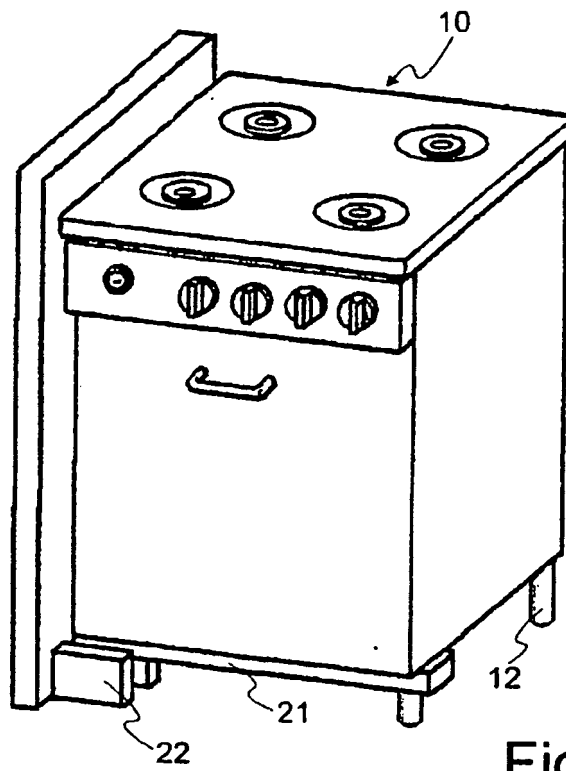


Fig. 1

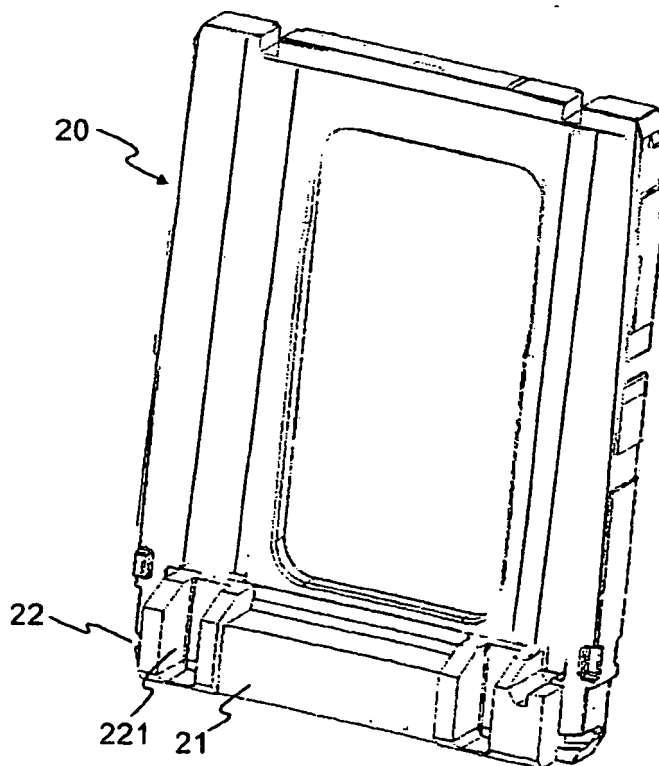


Fig. 2

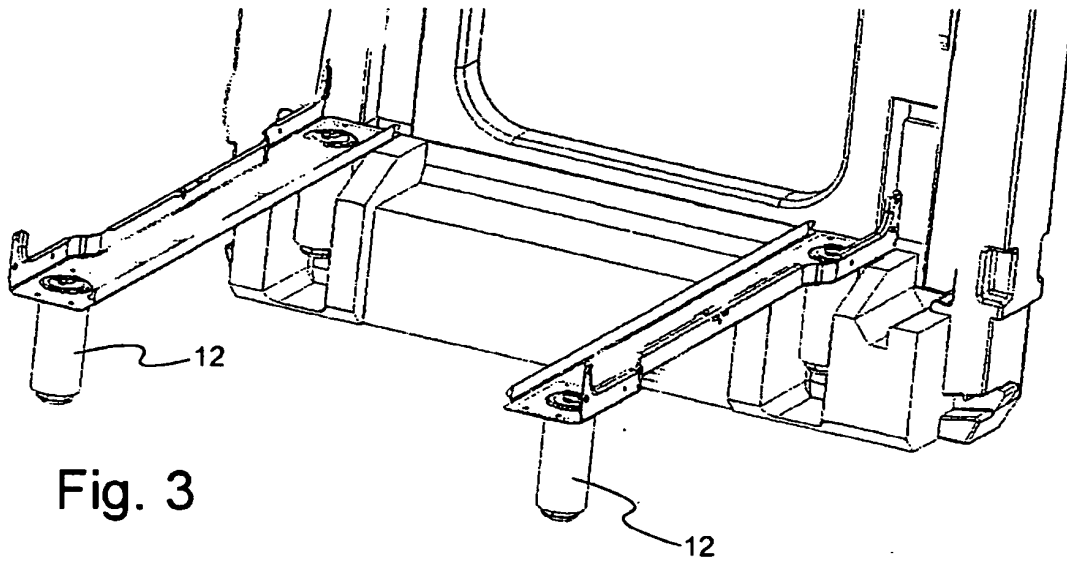


Fig. 3

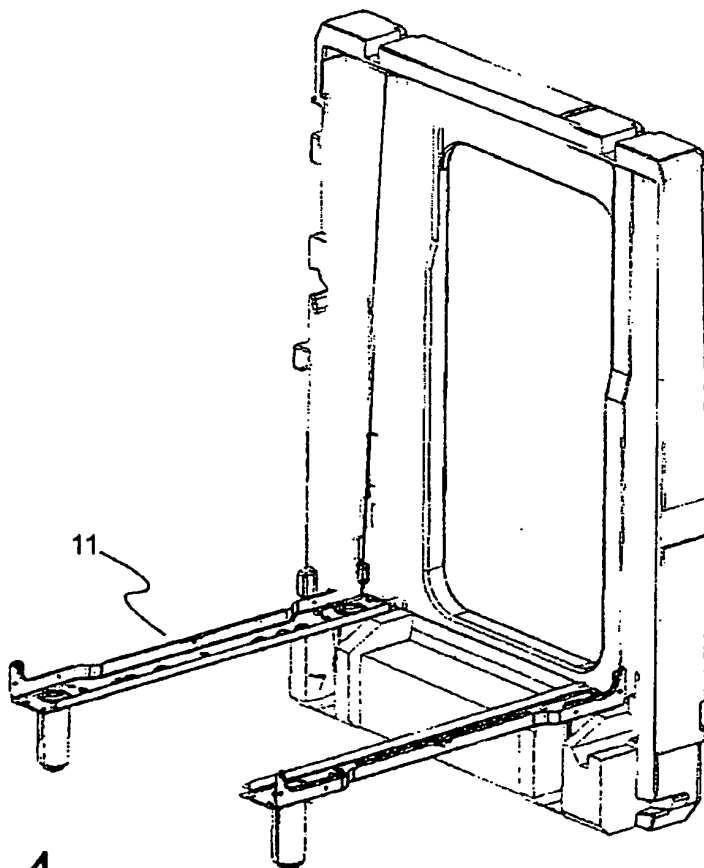


Fig. 4

REFERENCES CITED IN THE DESCRIPTION

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