METHOD OF PACKING AND TRANSPORTING TELEVISIONS

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ABSTRACT

A method of packing and transporting televisions includes placing a television into a protective box in a manufacturing district, in which the television is produced. The television and the protective box are transferred from the manufacturing district to a delivery address. The television is taken out of the protective box and is set-up at the delivery address. The protective box is transferred from the delivery address back to the manufacturing district, and is used to pack and transfer another television.
S301 Putting a televisions into the protective box

S302 Transferring the television and the protective box from the manufacturing district to a container freight station or a warehouse

S303 Transferring the television and the protective box from the container freight station or the warehouse district to an assembly site

S304 Assembling the television at the assembly site

S305 Transferring the protective box from the assembly site back to the manufacturing district

FIG. 1
S301 Putting a televisions into the protective box

S402 Transferring the television and the protective box from the manufacturing district to an assembly site

S304 Assembling the television at the assembly site

S305 Transferring the protective box from the assembly site back to the manufacturing district

FIG. 4
S301 Putting a television into the protective box
S502 Transferring the television and the protective box from the manufacturing district to a dealer warehouse or a distributor warehouse
S503 Transferring the television and the protective box from the dealer warehouse or the distributor warehouse district to an assembly site
S304 Assembling the television at the assembly site
S305 Transferring the protective box from the assembly site back to the manufacturing district

FIG. 5
METHOD OF PACKAGING AND TRANSPORTING TELEVISIONS

BACKGROUND

[0001] 1. Technical Field

[0002] The disclosure relates to a packing and transporting method, and particularly to a method of packing and transporting televisions.

[0003] 2. Description of the Related Art

[0004] In transportation of goods, corrugated cartons can protect products and make transportation easier. The packaging is usually discarded after unpacking the products. The discarded packaging materials are not only a huge waste, but also cause environmental pollution.

[0005] To protect the goods, the goods are first placed into plastic bags, then sandwiched between Styrofoam sheets, placed into cartons, and the cartons are sealed with sealing tape. The cartons are stacked onto pallets and the pallets are loaded into containers using forklifts, and the containers are sent to the warehouse. The pallets are unloaded from the containers with forklifts and stored in the warehouse. When consumers order goods, the cartons are separated or taken off of the pallets and are transported to the consumers. During transport, ropes are used to secure the cartons in the transportation vehicle to prevent the cartons from jostling or falling. At the delivery address, the carton is delivered to the consumer. Next, the sealing tapes, the Styrofoam, the carton and the plastic bags are left at the consumers’ place and then discarded.

[0006] Accordingly, there is a major expense for packing and transferring the goods from the manufacturers, the retailers, and the freight companies.

[0007] In addition, the package waste is a serious problem. The package waste leads to environmental pollution, and additional cost is needed for waste disposal.

[0008] Therefore, it is desirable to provide a method of packing and transporting televisions, which can overcome the described limitations.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] Many aspects of the present disclosure can be better understood with reference to the drawings. The components in the drawings are not necessarily drawn to scale, the emphasis instead being placed upon clearly illustrating the principles of the present disclosure for packing and transporting televisions. Moreover, in the drawings, like reference numerals designate corresponding parts throughout the views.

[0010] FIG. 1 illustrates a flowchart of a method of packing and transporting televisions according to a first embodiment of the present disclosure.

[0011] FIG. 2 illustrates an exploded, isometric view of an empty protective box.

[0012] FIG. 3 illustrates an exploded, isometric view of the protective box with a television.

[0013] FIG. 4 illustrates a flowchart of a method of packing and transporting televisions according to a second embodiment of the present disclosure.

[0014] FIG. 5 illustrates a flowchart of a method of packing and transporting televisions according to a third embodiment of the present disclosure.

DETAILED DESCRIPTION

[0015] Embodiments of a method of packing and transporting televisions as disclosed are described in detail here with reference to the drawings. The method of the present disclosure is adopted to reuse a protective box for packing and transporting televisions. The first embodiment takes a method that transports the televisions through a freight station or a warehouse as an example, but does not limit the present disclosure.

[0016] FIGS. 1 through 3 show that in step S301, a television 200 is first placed into a protective box 400 in a first factory where the television 200 is produced. The television 200 includes a display 202, a remote control 204 and a base 206. The components of the television 200 may be changed as required. For example, the television 200 may further include a power line, batteries, a wall mount, screws, and other fixing components. The base 206, the wall mount, the screws, and fixing components are all support structures, which support and fasten the display.

[0017] The protective box 400 includes a case 402, a first cushion 404, a second cushion 406, a third cushion 408, edge covering strips 410 and wheels 412. The case 402 may be made with fireproof plates. The edge covering strips 410 may be made with aluminum alloy. The edge covering strips 410 make the protective box 400 more durable. The wheels 412 make the transformation of the protective box 400 easier.

[0018] The first cushion 404, the second cushion 406 and the third cushion 408 may define a television-receiving space. The television-receiving space is adopted to receive the television 200, so the shape of the space is similar to the shape of the television 200. For example, the first cushion 404 defines a display-receiving space 414; the second cushion 406 defines a base-receiving hole 416 and a hole 420; the third cushion 408 defines an accessory-receiving space 418. In other words, the television-receiving space includes the display-receiving space 414, the base-receiving hole 416, and the accessory-receiving space 418. The first cushion 404, the second cushion 406 and the third cushion 408 are made with elastic material, such as expanded polyethylene (EPE), ethylene-vinyl acetate (EVA) or mixture of them.

[0019] Procedures of packing the television 200 is shown as follows. The protective box 400 is taken to the first factory. The first cushion 404 may be pre-placed in the protective box 400. A protective pad, such as a foam paper, may be placed above the first cushion 404 as an extra protection. Thereafter, the display 202 is placed into the display-receiving space 414. In case there is a foam paper, the foam paper is folded to cover the display 202. The display 202 is next covered by the second cushion 406, and the base 206 is inserted into the base-receiving hole 416. That is, the display 202 is sandwiched by the first cushion 404 and the second cushion 406.

[0020] The third cushion 408 is inserted into the hole 420. The remote control 204 is placed into the accessory-receiving space 418. Next, the protective box 400 is closed, and is locked with butterfly locks. Elasticity of the first cushion 404, the second cushion 406 and the third cushion 408 not only protects the television 200 from impact forces but can also act as a buffer for securing the television 200 with drawstrings or ropes during transportation. The display 202, the remote control 204 and the base 206 are separated from each other in the protective box 400.

[0021] In step S302, the television 200 and the protective box 400 are transferred from the first factory of the manufacturing district to a container freight station, a manufacturer
In step S303, the television 200 and the protective box 400 are transferred from the container freight station, the manufacturer warehouse or the freight warehouse to a delivery address. The delivery address is a place predetermined by the costumer. For example, the delivery address may be a house of the costumer.

In step S304, the television 200 is taken from the protective box 400 and is set-up at the delivery address by a worker. That is, the base 206 is attached to the display 202 and placed in location determined by the costumer.

In step S305, the protective box 400 is transferred from the delivery address back to the manufacturing district without receiving the television 200, so the protective box 400 can be re-used. It should be noted that, the protective box 400 can be directly transferred back to the first factory, or transferred to another factory or a warehouse.

When needed, the protective box 400 is taken to a factory producing televisions, such as the original first factory or a second factory of the manufacturing district, and the protective box 400 is re-used according to the above-mentioned step S301 through step S305.

In the spirit of re-using the protective box, the steps of packing and transferring televisions can be changed or omitted. For example, the step S302 and step S303 may be combined as a step S402, so the protective box 400 and the television 200 are directly transferred from the manufacturing district to the delivery address in FIG. 4.

FIG. 5 shows that in case the television is sold through a dealer or a distributor, the procedure of transferring the television and the protective box from the manufacturing district to the delivery address includes the step S502 of transferring the television and the protective box from the manufacturing district to a dealer warehouse or a distributor warehouse, and a step S503 of transferring the television and the protective box from the dealer warehouse or the distributor warehouse to the delivery address.

The order of the method can also be changed. For example, the remote control 204 may be placed into the accessory-receiving space 418, before the base 206 and the display 202 are placed into the base-receiving hole 416 and the display-receiving space 414 individually. In other cases, the protective box 400 can be transferred to the original container freight station or another container freight station before being sent back to the manufacturing district.

The structure of the protective box 400 and the television 200 can also be changed. The shapes of the first cushion 404, the second cushion 406, and the third cushion 408 may be adjusted according to the specification and size of the television. Therefore, the present disclosure can be used to pack and transfer televisions having various specifications and sizes with the same protective box 400, by merely changing the cushions. If there are other components, such as a power line, batteries, a wall mount or screws, the cushions of the protective box 400 can be changed to receive them.

The method of the present disclosure makes the packing, transferring and un-packing of televisions easier, improves the protection for the televisions, and decreased the cost of waste disposal. Most important of all, the present disclosure effectively decreases waste disposal and environmental pollution.

What is claimed is:

1. A method of packing and transporting a plurality of televisions, comprising:
   - placing one of the plurality of televisions into a protective box in a manufacturing district, in which the one of the plurality of televisions is produced;
   - transferring the one of the plurality of televisions and the protective box from the manufacturing district to a delivery address;
   - taking the one of the plurality of televisions out from the protective box and setting-up the one of the plurality of televisions at the delivery address;
   - transferring the protective box from the delivery address back to the manufacturing district; and
   - placing another one of the plurality of televisions into the protective box in the manufacturing district, in which the another one of the plurality of televisions is produced.

2. The method of claim 1, wherein the manufacturing district comprises a first factory, and the plurality of televisions are produced and packed in the first factory.

3. The method of claim 1, wherein the manufacturing district comprises a first factory and a second factory, the one of the plurality of televisions is produced and packed in the first factory, and the another one of the plurality of televisions is produced and packed in the second factory.

4. The method of claim 1, wherein the protective box comprises a case, a plurality of edge covering strips and a plurality of wheels.

5. The method of claim 1, wherein the protective box comprises at least one cushion.

6. The method of claim 5, wherein the at least one cushion is made with expanded polyethylene.

7. The method of claim 5, wherein the at least one cushion is made with ethylene-vinyl acetate.

8. The method of claim 1, wherein transferring the one of the plurality of televisions and the protective box from the manufacturing district to the delivery address comprises:
   - transferring the one of the plurality of televisions and the protective box from the manufacturing district to a container freight station; and
   - transferring the one of the plurality of televisions and the protective box from the container freight station to the delivery address.

9. The method of claim 1, wherein transferring the one of the plurality of televisions and the protective box from the manufacturing district to the delivery address comprises:
   - transferring the one of the plurality of televisions and the protective box from the manufacturing district to a manufacturer warehouse; and
   - transferring the one of the plurality of televisions and the protective box from the manufacturer warehouse to the delivery address.

10. The method of claim 1, wherein transferring the one of the plurality of televisions and the protective box from the manufacturing district to the delivery address comprises:
    - transferring the one of the plurality of televisions and the protective box from the manufacturing district to a freight warehouse; and
    - transferring the one of the plurality of televisions and the protective box from the freight warehouse to the delivery address.

11. The method of claim 1, wherein transferring the one of the plurality of televisions and the protective box from the manufacturing district to the delivery address comprises:
    - transferring the one of the plurality of televisions and the protective box from the manufacturing district to a dealer warehouse; and
transferring the one of the plurality of televisions and the protective box from the dealer warehouse to the delivery address.

12. The method of claim 1, wherein transferring the one of the plurality of televisions and the protective box from the manufacturing district to the delivery address comprises:
   transferring the one of the plurality of televisions and the protective box from the manufacturing district to a distributor warehouse; and
   transferring the one of the plurality of televisions and the protective box from the distributor warehouse to the delivery address.

13. The method of claim 1, further comprising storing the protective box in a warehouse of the manufacturing district, after transferring the protective box from the delivery address back to the manufacturing district.

14. The method of claim 1, wherein the one of the plurality of televisions comprises a display, a power line and a support structure.

15. The method of claim 14, wherein the display, the power line and the support structure are separated from each other in the protective box.

16. The method of claim 15, wherein assembling the one of the plurality of televisions at the delivery address comprises attaching the support structure to the display.

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