Claims

1. Method for the secondary packaging of ophthalmic lenses for example contact lenses, contained in individual primary packages (17), the method comprising the steps of

providing a plurality of single individual primary packages (17) each containing an ophthalmic lens,

determining a number of single individual primary packages (17) to be taken from the plurality of single individual primary packages (17) and to be packed into a secondary package (16),

providing a secondary package blank (1) of a size capable of accommodating the determined number of single individual primary packages (17) to be packed into the secondary package (16),

placing each single individual primary package (17) of the determined number of single individual primary packages (17) into the secondary package blank (1),

folding and closing the secondary package blank (1) containing the determined number of single individual primary packages (17) to form the secondary package (16).

2. Method according to claim 1, wherein the step of providing a plurality of single individual primary packages (17) comprises providing a plurality of single individual primary packages (17) containing at least two different types of ophthalmic lenses, each type of ophthalmic lens being different from another type of ophthalmic lens in at least one physical or chemical property.

3. Method according to claim 2, wherein the number and the type of ophthalmic lenses which are contained in the single individual primary packages (17) and which are to be packed into the secondary package (16) is determined by a customer order.

4. Method according to any one of the preceding claims, wherein the step of providing a secondary package blank (1) comprises providing a plurality of predetermined different secondary package blanks (1), the different secondary package blanks (1) having an identical width (30).

5. Method according to any one of the preceding claims, wherein the step of placing each single individual primary package (17) into the secondary package blank (1) comprises placing each single individual primary package (17) in a corresponding individual cut-out portion (4) formed in the secondary package blank (1).

6. Method according to claim 5, wherein the single individual primary packages (17) are placed in the corresponding individual cut-out portions (4) of the secondary package blank (1) such that the single individual primary packages (17) are retained in the respective cut-out portions (4).

7. Method according to any one of the preceding claims, wherein the step of folding and closing the secondary package blank (1) comprises folding and closing the secondary package blank (1) to form a wallet-type secondary package (16).

8. Method according to any one of the preceding claims, wherein the method further comprises the step of applying images, graphic designs, written information, or the like to the secondary package blank (1), to the secondary package (16) or to the single individual primary package (17), or to any combination thereof.

9. Method according to claim 8, wherein the step of applying images, graphic designs, written information, or the like is determined by a customer order.

10. System for the secondary packaging of ophthalmic lenses, for example contact lenses, contained in individual primary packages (17), the system comprising

a storage unit for providing a plurality of single individual primary packages (17) each containing an ophthalmic lens,

an input unit (24) for determining a number of single individual primary packages (17) to be taken from the storage unit and to be packed into a secondary package (16),

a package blank magazine (23) for providing a secondary package blank (1), the secondary package blank (1) being capable of accommodating the determined number of single individual primary packages (17),

at least one robot (26) for placing each single individual primary package (17) of

the determined number of single individual primary packages (17) into the secondary package blank (1), and

a folding unit (27) for folding and closing the secondary package blank (1) containing the determined number of single individual primary packages (17) to form the secondary package (16).

11. System according to claim 10, wherein the storage unit comprises at least one tray (21), each tray (21) having at least two compartments, each compartment being sized to accommodate at least one single individual primary package (17).

12. System according to any one of claims 10 or 11, wherein the input unit (24) is adapted for receiving and processing a customer order determining the number of single individual primary packages (17) which are to be taken from the plurality of single individual primary packages (17) and which are to be packed into the secondary package (16).

13. System according to any one of the preceding claims, wherein the package blank magazine (23) is adapted for providing a plurality of predetermined different secondary package blanks (1) having an identical width (30).

14. System according to any one of claims 11 to 13, further comprising a plurality of robots (26) arranged one after the other along first and second transport lines for transporting the trays (21) and the secondary package blanks (1) respectively.

15. System according to any one of the preceding claims, further comprising an application unit (28) adapted for applying images, graphic designs, written information, or the like to the secondary package blank (1), to the secondary package (16) or to the single individual primary package (17), or to any combination thereof.

Claims

1. Method for the secondary packaging of ophthalmic lenses for example contact lenses, contained in individual primary packages (17), the method comprising the steps of providing a plurality of single individual primary packages (17) each containing a single ophthalmic lens, determining a number of single individual primary packages (17) to be taken from the plurality of single individual primary packages (17) and to be packed into a secondary package (16), **characterized by** the steps of
from a predetermined number of secondary package blanks (1) of different sizes selecting and providing a secondary package blank (1) of a size capable of accommodating the determined number of single individual primary packages (17) to be packed into the secondary package (16),
placing each single individual primary package (17) of the determined number of single individual primary packages (17) into the selected secondary package blank(1),
folding and closing the selected secondary package blank (1) containing the determined number of single individual primary packages (17) to form the secondary package (16).

2. Method according to claim 1, wherein the step of providing a plurality of single individual primary packages (17) comprises providing a plurality of single individual primary packages (17) containing at least two different types of ophthalmic lenses, each type of ophthalmic lens being different from another type of ophthalmic lens in at least one physical or chemical property.

3. Method according to claim 2, wherein the number and the type of ophthalmic lenses which are contained in the single individual primary packages (17) and which are to be packed into the secondary package (16) is determined by a customer order.

4. Method according to anyone of the preceding claims, wherein the step of selecting and providing a secondary package blank (1) comprises selecting and providing a plurality of predetermined different secondary package blanks (1), the different secondary package blanks (1) having an identical width (30).

5. Method according to anyone of the preceding claims, wherein the step of placing each single individual primary package (17) into the secondary package blank (1) comprises placing each single individual primary package (17) in a corresponding individual cut-out portion (4) formed in the secondary package blank (1).

6. Method according to claim 5, wherein the single individual primary packages (17) are placed in the corresponding individual cut-out portions (4) of the secondary package blank (1) such that the single individual primary packages (17) are retained in the respective cut-out portions (4).

7. Method according to anyone of the preceding claims, wherein the step of folding and closing the secondary package blank (1) comprises folding and closing the secondary package blank (1) to form a wallet-type secondary package (16).

8. Method according to anyone of the preceding claims, wherein the method further comprises the step of applying images, graphic designs, written information, or the like to the secondary package blank (1), to the secondary package (16) or to the single individual primary package (17), or to any combination thereof.

9. Method according to claim 8, wherein the step of applying images, graphic designs, written information, or the like is determined by a customer order.

10. System for the secondary packaging of ophthalmic lenses, for example contact lenses, contained in individual primary packages (17), the system comprising
a storage unit for providing a plurality of single individual primary packages (17) each containing a single ophthalmic lens,

an input unit (24) adapted for determining a number of single individual primary packages (17) to be taken from the storage unit and to be packed into a secondary package (16),
characterized by
a package blank magazine (23) containing secondary package blanks (1) of different sizes, wherein the input unit (24) is adapted for selecting from the package blank magazine (23) a secondary package blank (1) of a size capable of accommodating the determined number of single individual primary packages (17),
at least one robot (26) configured to place each single individual primary package (17) of the determined number of single individual primary packages (17) into the selected secondary package blank (1), and
a folding unit (27) for folding and closing the selected secondary package blank (1) containing the determined number of single individual primary packages (17) to form the secondary package (16).

11. System according to claim 10, wherein the storage unit comprises at least one tray (21), each tray (21) having at least two compartments, each compartment being sized to accommodate at least one single individual primary package (17).

12. System according to anyone of claims 10 or 11, wherein the input unit (24) is adapted for receiving and processing a customer order determining the number of single individual primary packages (17) which are to be taken from the plurality of single individual primary packages (17) and which are to be packed into the secondary package (16).

13. System according to anyone of the preceding claims, wherein the package blank magazine (23) is adapted for providing a plurality of predetermined different secondary package blanks (1) having an identical width (30).

14. System according to anyone of claims 11 to 13, further comprising a plurality of robots (26) arranged one after the other along first and second transport lines for transporting the trays (21) and the secondary package blanks (1) respectively.

15. System according to anyone of the preceding claims, further comprising an application unit (28) adapted for applying images, graphic designs, written information, or the like to the secondary package blank (1), to the secondary package (16) or to the single individual primary package (17), or to any combination thereof.