

Claims

1. A storage assembly for storing perishable material, including:
a base adapted to store perishable material thereon, the base being
5 adapted for lifting by a pallet lifting machine;
a cover shell comprising:
a top and sidewall, the top and sidewall together being shaped to
fit over, and surround, perishable material on the base; and
a sealing member, the sealing member being adapted to seal
10 against the base to substantially inhibit ingress of air into the storage
assembly; and
a purging assembly provided on one or both of the base and cover shell,
connectable to a modified atmosphere source, and for delivering modified
atmosphere into the storage assembly from the modified atmosphere source.
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2. An assembly according to claim 1, wherein the cover shell is substantially
rigid and adapted to be lifted and fitted over the perishable material.
3. An assembly according to claim 2, wherein the cover shell has a cuboid
20 shape with a bottom surface removed so the cover shell can be fitted over the
perishable material.
4. An assembly according to any preceding claim, wherein the base is
substantially flat.
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5. An assembly according to claim 4, wherein the base comprises a
peripheral sealing member, and the sealing member of the cover shell contacts
the peripheral sealing member to seal the cover shell against the base.
- 30 6. An assembly according to any preceding claim, further comprising a
locking mechanism for fixing the cover shell onto the base.
7. An assembly according to claim 6, wherein the locking mechanism is
arranged to press the cover shell and base together, to apply pressure to the
35 sealing member.

8. An assembly according to claim 6 or 7, wherein the locking mechanism comprises one or more locking devices on each of four sides of the cover shell or base.
- 5 9. An assembly according to claim 8, wherein each locking device comprises an oval cross-section bar rotatably mounted on a first one of the cover shell and base and extending parallel to the sealing member, and wherein a second, different one of the cover shell and base comprises a projection over which the oval cross-section bar can be fitted, such that rotation of the oval cross-section
- 10 bar to point a major axis of the oval cross-section towards the projection increases pressure applied to the sealing member.
10. An assembly according to any preceding claim, wherein the purging assembly comprises one or more valves located on the top of the cover shell or
- 15 on the sidewall near the top, so that both valves are accessible from one side of the assembly when stored in a pallet storage system.
11. An assembly according to any preceding claim, wherein the base comprises an upper portion and a lower portion, the upper portion being
- 20 configured to seal against the cover shell and the lower portion being configured as a pallet.
12. An assembly according to any preceding claim, wherein the cover shell comprises a lower peripheral edge for abutting the base, to seal against the
- 25 base.
13. An assembly according to claim 12, wherein the sealing member is provided along the lower peripheral edge.
- 30 14. An assembly according to claim 4, wherein the sealing member comprises an elongate, flexible seal and the peripheral sealing member comprises a rigid rib that presses into the sealing member to seal the cover shell against the base.

15. A method of storing perishable material, including the steps of:
loading perishable material onto a base of a storage assembly
according to any preceding claim;
fitting the cover shell over the perishable material, thereby to
surround the perishable material;
sealing the cover shell to the base to inhibit ingress of air; and
purging the storage assembly, by the purging assembly, with a
modified atmosphere.
16. A method according to claim 15, wherein the cover shell is substantially
rigid, and fitting the cover shell over the perishable material comprises lifting
the cover shell over the perishable material and onto the base.
17. A method according to claim 15 or 16, wherein the sealing the cover shell
to the base comprises compressing the sealing member between the sidewall
and base.
18. A method according to claim 17, wherein compressing the sealing
member between the sidewall and base comprises actuating a locking
mechanism to press the cover shell onto the base.
19. A method according to claim 18, wherein actuating the locking
mechanism comprises actuating a plurality of locking devices located along the
sealing member when the cover shell is fitted over the perishable material, onto
the base.
20. A method according to any one of claims 15 to 19, wherein purging the
storage assembly comprises connecting the purging assembly to the modified
atmosphere source and delivering the modified atmosphere from the source into
the storage assembly.