CLAIMS

Claim 1. A preform coating device comprising:

a rotary holder holding a preform in a horizontal direction and making the preform rotate about an axial line of the preform; and

a dispenser having a slot and discharging a coating solution toward the preform from the slot in a planar state, wherein

a direction of discharge of the coating solution is a normal line direction of an outer circumferential surface of the preform.

Claim 2. The preform coating device according to claim 1, wherein the dispenser pulls the coating solution back into the dispenser when stopping discharge of the coating solution.

Claim 3. The preform coating device according to claim 1 or 2, wherein the dispenser discharges the coating solution until the preform rotates by 0.5 turn to less than 1 turn.

Claim 4. The preform coating device according to any one of claims 1 to 3, wherein

a longitudinal width of the slot can be adjusted and

the rotary holder slows a rotational speed of the preform when the longitudinal width of the slot is relatively narrow compared to when the longitudinal width of the slot is relatively broad.

Claim 5. The preform coating device according to claim 4, wherein the longitudinal width of the slot is 0.1 mm to 1.0 mm.

Claim 6. The preform coating device according to any one of claims 1 to 5, further comprising a deaeration module for deaerating the coating solution supplied to the dispenser, the deaeration module including hollow fiber membranes.

Claim 7. The preform coating device according to any one of claims 1 to 6, wherein the coating solution is a barrier coating solution having a gas barrier property or a protective coating solution for protecting the barrier coating solution.

Claim 8. A preform coating method comprising:

a step of holding a preform in a horizontal direction and making the preform rotate about an axial line of the preform; and

a step of discharging a coating solution toward the rotating preform from a slot of

the dispenser in a planar state, wherein

a direction of discharge of the coating solution is a normal line direction of an outer circumferential surface of the preform.

Claim 9. The preform coating method according to claim 8, further comprising pulling the coating solution back into the dispenser when stopping discharge of the coating solution.

Claim 10. The preform coating method according to claim 8 or 9, further comprising discharging the coating solution until the preform rotates by 0.5 turn to less than 1 turn.

Claim 11. The preform coating method according to any one of claims 8 to 10, further comprising slowing the rotational speed of the preform when a longitudinal width of the slot is relatively narrow compared to when the longitudinal width of the slot is relatively broad.

Claim 12. The preform coating method according to claim 11, wherein the longitudinal width of the slot is 0.1 mm to 1.0 mm.

Claim 13. The preform coating method according to any one of claims 8 to 12, further comprising a step of using a deaeration module having hollow fiber membranes to deaerate the coating solution supplied to the dispenser.

Claim 14. A preform coating device comprising:

a rotary holder holding a preform in a horizontal direction and making the preform rotate about an axial line of the preform;

a conveyor conveying the preform by moving the rotary holder;

a dispenser discharging a coating solution toward the preform; and

a dryer arranged separated from the dispenser and drying the coating solution coated on the preform, wherein

the conveyor conveys the preform in a state held in a horizontal direction.

Claim 15. The preform coating device according to claim 14, wherein

the rotary holder grips an opening part of the preform and makes the preform rotate while the dispenser is discharging the coating solution, and

the preform coating device further comprises a preform support, the preform support supporting a bottom part side end of the cylindrical body part of the preform while the dispenser is discharging the coating solution.

Claim 16. The preform coating device according to claim 15, wherein at least the part of the preform support contacting the preform is comprised of polyoxymethylene.

Claim 17. The preform coating device according to any one of claims 14 to 16, wherein the rotary holder makes the preform rotate while the dryer is drying the coating solution.

Claim 18. The preform coating device according to any one of claims 14 to 17, wherein
the preform coating device comprises a plurality of rotary holders, and
the conveyor successively conveys the plurality of preforms.