★★★ ＜第32回知的財産翻訳検定試験【第17回和文英訳】＞ ★★★
≪１級課題 -機械工学-≫

【問 1】
[0001] The invention relates to cleansing a bathwater heater by using water pressure of tap water and a cleansing tool.
[0002] Conventional methods of cleansing a bathwater heater have been limited to removing a diffuser of a bathtub and washing the inside of the bathwater heater by forcing a strong flow of water therein using a garden hose, washing using commercially available carbonate-based chemicals, or the like.
[0003] These methods have the following problems.

Forcing in a strong flow of water by using a garden hose does not remove all sludge, and the sludge reaccumulates soon.

The chemicals employed in cleansing are not easy to use, are costly with each use, and lead to water pollution.

When reheating bathwater while taking a bath in milky bathwater in particular, sludge audibly spews from the hot-water port, which is a foul and unsanitary situation.

The present invention has been made to eliminate these defects.
[0004] Provided is a stepped resin pipe (1), a nozzle portion (2), and a sponge (3) that serves as a cleaning tool to remove filth and that is disposed on a distal end of the nozzle portion (2). Water pressure of tap water is used to cleanse the bathwater heater. The present invention is a bathwater heater cleansing tool having the above configuration.

【問 2】
[0016] Fig. 2 is a plan view for describing a type-1 jig 2a. Fig. 2 is a see-through illustration looking through a jigsaw main unit 1, for detailed description, showing positional relations among a base plate 1a, a circular guide 8, a jigsaw blade 10 that is a cutting blade, and the type-1 jig 2a.
[0017] An angled slider 4 that slides over a half-angle, i.e., a 45-degrees line of a right-angle portion of a board is held on an upper face of the type-1 jig 2a, which is made of metal and is provided with fixing fittings 3 at both ends on the rear face thereof, such that whether to be fixed by two guide blocks 7 provided with retaining screws or to slide is selectable. A distal end portion

5 of the angled slider 4 has an arrow-tip shape, and provided therein is a rotational bearing 6 to which is rotatably linked a connecting end of a circle guide 8 specific to the jigsaw.

[0018] Fig. 3 is a frontal view of the type-1 jig. The fixing fittings 3 support the board of which a quadrant cut is to be performed on a corner, from the rear side at adjacent sides A and B of the right angle portion to be cut. Fig. 3 illustrates the state of linkage of the distal end portion 5, the rotational bearing 6, and the circular guide 8.

[0019] When placing a board on the type-1 jig 2a, the arrow-tip-shaped distal end portion 5 of the angled slider 4 is slid to be positioned at a vertex G of the board, followed by fixing the two screwed fixing fittings 3 as to the board. Thus, the position of the rotational bearing 6 at the distal end portion 5 of the angled slider 4 is always at some point on the 45-degrees line within a slidable region, and accordingly the distance to side A is the same as the distance to side B, regardless of where the rotational bearing 6 is situated. A side face of the cutting blade 10 of the jigsaw 1 is positioned at a cutting start position on side A or side B, and the retaining screws of the guide blocks 7 of the angled slider 4 and a retaining screw of a guide block of the circle guide 8 are locked. In this state, the board is cut by moving the jigsaw to the other side following the turning radius of the circle guide 8, thereby completing a quadrant cut with a high perfection level in a single cutting operation.

FIG. 2

45-DEGREES LINE

【問 3】

1. A fertilizer spreader comprising:

a machine body (F) that travels in a self-propelled manner or a towed manner;

an impeller case (C) that accommodates and includes an impeller (4) that rotates about an axial line extending vertically;

a hopper (H) having an inner space portion in which an agitator (5) that rotates about the axial line extending in the vertical direction is mounted and included, the impeller case (C) and the hopper (H) being vertically mounted on the machine body (F) such that the hopper (H) is

positioned on or above the impeller case (C);

a clutch (K) that is switchable between transmission and non-transmission modes;

a central driving shaft (2) coupled to a rotation shaft (20) of the agitator (5) in the hopper (H) via the clutch (K), the central driving shaft (2) being installed in the machine body (F) in a pivoting manner such that an upper end portion of the central driving shaft (2) extends into the hopper (H);

an outer cylindrical shaft (3) coupled to a shaft core portion of the impeller (4) in the impeller case (C), the shaft core portion being fitted to an outer periphery of a lower end portion of the central driving shaft (2), the outer cylindrical shaft (3) being installed in the machine body (F) in a pivoting manner;

transmission mechanisms (d1, d2); and

an input shaft (1) coupled to the central driving shaft (2) and the outer cylindrical shaft (3) via the respective transmission mechanisms (d1, d2) to drive the impeller (4) and the agitator (5) to rotate at different rotational speeds.