

★★★<第20回知的財産翻訳検定試験【第11回和文英訳】>★★★

<<機械工学>>

1.

[0006]

Japanese Unexamined Patent Application Publication No. 2099-99999, for example, proposes forming a coating of platinum or platinum alloy on the entire surface of a body (fusion cell) made of a refractory such as fireproof bricks or the like by flame spraying, to solve the problem of lower quality due to erosion of the refractory.

[0008]

Now, a lower tip 103 of the body 100 made of fireproof bricks is somewhat rounded, as shown in the enlarged illustration in Fig. 1. The reason is that if the lower tip 103 is sharp, it is easily chipped during manufacturing of the body 100 or while forming plate glass g. This can lead to serious trouble, such as a fissure starting in the body 100 starting at the chipped portion.

[0009]

On the other hand, the rounded lower tip 103 of the body 100 can lead to a situation where molten glass gm separates from side faces 102 of the body 100 before fusing at the lower tip 103. Once this happens, a gap X such as illustrated in Fig. 1 will be formed between the lower tip 103 of the body 100 and the molten plate glass g.

[0010]

Formation of such a gap X results in air in the gap X finding its way into the fused portion when fusing the molten glass gm, creating air bubbles in the plate glass g, which is a deteriorating factor of the product quality of the plate glass g.

[0011]

Coating the surface of the refractory body 100 with platinum or the like by spraying, as in Japanese Unexamined Patent Application Publication No. 2099-99999, does nothing to change this situation. That is, even if the surface of the body 100 is coated, the coating invariably is rounded, conforming to the shape of the lower tip 103 of the body 100. Accordingly, the gap X illustrated in Fig. 1 may still be formed even if a body 100 coated by platinum or platinum alloy by thermal spraying is used, so the problem of defects such as bubbles still may occur.

[0012]

The present invention has been made in light of the above-described situation, and accordingly it is an object of the present invention to prevent defects such as bubbles from being formed in plate glass.

2.

A knitted glove according to the present invention was knitted using five strands of the composite yarn 5 produced in the first embodiment, by a 7-gauge glove knitting machine manufactured by Shima Seiki Mfg., Ltd. The cutting resistance of the knitted glove according to the present invention was 16,256 cycles. Five strands of 100% Twaron spun yarn 20/2 were similarly used to knit a reference knotted glove by the 7-gauge glove knitting machine manufactured by Shima Seiki Mfg., Ltd. The cutting resistance of the reference knitted glove was 16 cycles. The hard texture of the knitted glove according to the present invention made it less comfortable to wear than the reference knitted glove, but this presented no problem with regard to usability. The knitted glove according to the present invention was also produced at a lower cost than the reference knitted glove.

3.

1. A tensioner (10) for belt transmission system, comprising:
 - a cylinder (11) with a first bore (13) and an oil path (18) inside the cylinder (11), the oil path (18) communicating with the first bore (13);
 - a piston (12) with a second bore (17) inside the piston (12), the piston (12) being inserted into the first bore (13);
 - a coil spring (16) slidably stored inside the second bore (17), the coil spring (16) having respective ends in contact with a bottom portion of the second bore (17) and in contact with a bottom portion of the first bore (13); and
 - a check valve (19) that allows a flow of hydraulic oil from the oil path (18) to the first bore (13) and restricts a reverse flow of the hydraulic oil flow, wherein the piston (12) has an outer peripheral in a part of which a piston side rack (20) is formed,
- the cylinder (11) includes:
 - an aperture (22) that communicates with the first bore (13);
 - a cylinder side rack (21) that fits the piston side rack (20) through the aperture (22); and
 - a biasing portion (25) that biases the cylinder side rack (21) in a direction

to the piston side rack (20).