

SPINDLE UNIT

ABSTRACT

A region of a side surface of a tip part of a spindle, the region being opposed to an inside surface of a cover with a gap therebetween, is formed with a groove going round the spindle one time. Then, at a location where the groove is formed, the sectional area of the gap between the tip part of the spindle and the cover is enlarged. Hence, the gap between the tip part of the spindle and the cover can be expressed to be a space in which a space (passage) having a small sectional area and a space (expansion chamber) having a large sectional area are alternately disposed. In this case, even in a case where processing liquid containing processing swarf enters into the gap between the tip part of the spindle and the cover, the processing liquid is not liable to enter into the passage provided in the depth of the expansion chamber. As a result, deposition of the processing liquid containing the processing swarf onto the tip part of the spindle is restrained, and it is possible to reduce the frequency of cleaning of the tip part.

[FIG. 3]