

ABSTRACT

There is provided a sensor head for a crystal oscillator type of film thickness monitor which is capable of restraining: a stepping motor from getting out of step; or magnetizing current of the stepping motor from increasing. The sensor head has: a sensor head main body (1) which has disposed therein the stepping motor (Sm); a holder (2) which has disposed on an upper surface thereof a plurality of crystal oscillators (Co) and which is driven for rotation by the stepping motor; and a mask body (3) which is mounted on the sensor head main body so as to cover an upper surface of the holder (2) and which has opened therein a film-forming window (31) faced by one of the crystal oscillators. The sensor head also has: a first electrode (4) fixed to that portion of the sensor head main body which is located right under the film-forming window; and second electrodes (5) which are in electrical conduction with each of the crystal oscillators and which are disposed to protrude under a lower surface of the holder such that, when the holder is rotated by the stepping motor to a phase in which one of the crystal oscillators and the film-forming window coincide with each other in a vertical direction, the first electrode and the second electrode, which are made of the same kind of metal, are brought into contact with each other for electrical conduction. A lubricant supply means (4b) is disposed for supplying a surface of the second electrode, before contacting the first electrode, with a solid lubricant.