

ABSTRACT

An Oscillation Switch and a Portable Electrically Driving Mechanism

A oscillation switch (10) consists of a pair of ring-shaped electrodes (11, 12) each having an inner surface coaxially provided with a projection (16) and spaced apart at a predetermined distance, and balls (13) arranged in a space formed between the electrodes so that the balls (13) engage the projections (16) to electrically connecting the electrodes (11, 12) together when oscillation or lateral sliding occur. A portable electrically driving machine provided with the oscillation switch has the oscillation switch (10) provided on a frame (1) and has a structure which stops a tool rotating motor (4M) and a feed motor (5M) by interrupting the electric power supply to a control unit (6) of the electric tool (4). The use of the oscillation switch (10) allows the tool rotating motor or the feed motor to stop as soon as lateral sliding or oscillation tends to occur or when the portable electrically driving machine tends to fall even if the portable electrically driving tool takes any posture.

Fig.3.