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(54) Title: DEVICE AND METHOD FOR METERING A PARTICULATE SUBSTANCE AND APPARATUS COMPRISING A PLURALITY OF SUCH DEVICES

(57) Abstract

The present invention relates to a method of and a device for metering a predetermined amount of a particulate substance, and to a metering apparatus including two or more such metering devices. The metering device comprises: a body member (2) defining a metering chamber (20); an unbroken inflow path having an inlet (6) and leading to the metering chamber (20), wherein the inflow path is rotatable about an axis (4) inclined (α) relative to the vertical (V) such that at least a part of the inflow path is inclined downwards in a loading state and upwards in an emptying state, whereby the inflow path in use guides a gravity-induced flow of particulate substance into the metering chamber (20) in the loading state and provides a gravitational inlet lock which prevents the flow of particulate substance into the metering chamber (20) in the emptying state; an outflow path having an outlet (8) and leading from the metering chamber (20), the outflow path including means which prevents the flow of particulate substance out of the metering chamber (20) in the loading state, but admits the flow of particulate substance out of the metering chamber (20) in the emptying state; and a reservoir (30) connected to the inflow path so as in use to rotate therewith and being adapted, when containing any volume of particulate substance, so as on rotation to provide movement of the contained particulate substance at the inlet (6) and thereby ensure the flow of particulate substance to the metering chamber (20).

