

Title (en)

Apparatus and method for the drying of particulate material

Title (de)

Vorrichtung und Verfahren zum Trocknen von Partikelmaterial

Title (fr)

Appareil et procédé de séchage de matière particulaire

Publication

EP 2657404 A2 20131030 (EN)

Application

EP 12167161 A 20120508

Priority

GB 201207116 A 20120423

Abstract (en)

The application provides an apparatus for drying particulate materials comprising: (i) a dryer (7) in which the particulate materials can be dried and heated, the dryer comprising a heating device (20); a drying chamber having an inlet (5) through which particulate material can be loaded into the drying chamber; an outlet (10) for dried and heated particulate material, and an exhaust gas outlet (6); (ii) means (30) for moving a stream of heated gas from the heating device (20) through the drying chamber, thereby to dry and heat the particulate material, and then out through the exhaust gas outlet (6) as exhaust gas; (iii) means defining a primary gas flow path extending from the exhaust gas outlet (6) to a discharge vent (32) through which exhaust gas can be discharged to atmosphere; a filtering device (27) being disposed between the exhaust gas outlet (6) and the discharge vent (32) for removing particulate matter from the exhaust gas prior to discharge through the discharge vent; (iv) means (37, 38) defining a secondary gas flow path linked to a source of additional heated gas, whereby a downstream end of the secondary gas flow path communicates with the primary gas flow path at a location upstream of the filtering device; (v) a flow control device (38) associated with the secondary gas flow path, the flow control device (38) being operable to control flow of the additional heated gas along the secondary gas flow path and into the primary gas flow path thereby to regulate the temperature of the exhaust gas in the primary gas flow path so that it is higher than a dew point of the exhaust gas when the exhaust gas enters the filtering device (27).

IPC 8 full level

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CPC (source: EP GB)

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Citation (applicant)

GB 1018834 A 19660202 - STANDARD TELEPHONES CABLES LTD

Cited by

CN109958027A; IT201900002791A1; NO341785B1; CN111397330A; CN105917184A; EP3093598A4; US10279287B2

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