

Title (en)

METHOD, DEVICE AND INSTALLATION FOR ANALYSING A GAS EFFLUENT FOR DETERMINING DUST RATE

Title (de)

VERFAHREN, VORRICHTUNG UND EINRICHTUNG ZUR ANALYSE EINES GAS EFFLUENTEN ZUR STAUBRATEABESTIMMUNG

Title (fr)

PROCEDE, DISPOSITIF ET INSTALLATION POUR L'ANALYSE D'UN EFFLUENT GAZEUX AVEC DETERMINATION D'UN TAUX DE  
POUSSIERS

Publication

**EP 1032815 A1 20000906 (FR)**

Application

**EP 98955661 A 19981116**

Priority

- FR 9802435 W 19981116
- FR 9714384 A 19971117

Abstract (en)

[origin: FR2771174A1] The dust content of a water saturated flue gas stream is analyzed by a triboelectric probe (10) positioned in a stream portion which flows within a measurement conduit (5) and which has been heated to above the dew point. An analysis method for water saturated flue gas flowing in a stack comprises dust weight measurement by in-situ detection of the dust particle impact density on a triboelectric probe (10) introduced into a portion of the gas stream flowing along a measuring conduit (5) of the stack (1) at a location downstream of a heating jacket (14) which heats this stream portion locally to above the dew point of water in the flue gas. Independent claims are also included for the following: (a) equipment used for the above method and comprising a mechanically strong structure including an upper triboelectric probe guide tube (6) and a lower heating jacket supply system tube (12), the tubes (6, 12) passing through the stack wall and extending from the measuring conduit (5) or its heating jacket (14) to a fixture plate (3) for mounting on the stack wall; and (b) a flue gas analysis installation comprising the above equipment associated with a sampling system for collecting samples for gaseous pollutant analysis by an analyzer, an electronic unit for processing detection data from the triboelectric probe (10), an automatic controller which receives the data and the results from the analyzer and which converts them into values per unit volume of gas at normal temperature and pressure (NTP), and a monitoring computer system for handling the pollution control data.

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**G01N 15/06**

IPC 8 full level

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