

Title (en)
METHOD AND APPARATUS FOR MEASURING REFLECTIONS FROM UNBURNED CARBON

Title (de)
VORRICHTUNG UND VERFAHREN ZUM MESSEN DER REFLEKTIONEN VON UNVERBRANNTEM KOHLENSTOFF

Title (fr)
PROCEDE ET APPAREIL DE MESURE DES REFLEXIONS DE CHARBON NON BRULE

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Application
EP 97928142 A 19970707

Priority
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• DK 74796 A 19960705

Abstract (en)
[origin: WO9802729A1] In a method and an apparatus for reflection measurement of the content of unburned carbon in fly ash from a heating plant, whereby is used a residue coal or carbon meter with a transparent measuring tube, preferably of glass, wherein an ash sample taken from the flue duct of the heating plant can be passed through one end of the measuring tube, and be deposited inside the measuring tube and after completion of the reflection measurement can be blown out of the measuring tube or back to the flue duct. The reflection measurement is made by directing wave trains of infrared light emitted from sources towards each of at least two different areas on the surface of the ash sample located in the tube and at a certain distance from the sources, that the part of the wave train, which thereby is reflected, is returned to respective infrared detecting receivers, and that the proportion between the energy of mutually dependent wave trains respectively emitted towards the ash sample surface and reflected therefrom is measured, so that at least one reflection measurement is made on at least two different areas abutting the inner side of the measuring tube on the outer surface of the ash sample, and that the results of the reflection measurements are compared in the form of reflection coefficients. Thereby is achieved a very fast, sturdy, simple and easy operable method and apparatus without using hazardous microwaves.

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