

## ABSTRACT

**METHOD OF CONDUCTING A HYDROTHERMAL CARBONISATION REACTION**

In the context of hydrothermal carbonisation biomass is converted into biocoal, in which case the yield from the reaction depends on the reaction conditions. The reaction conditions also include the duration of the carbonisation reaction, thus the time period within which the slurry composed of water and biomass remains in the reaction tank and is exposed to pressure and temperature. These conditions should be selected so that the greatest possible dry residue of carbonised material remains in the slurry. It has proved that the amount of dry residue changes during the carbonisation reaction with a plot largely similar to that of the pH value of the slurry. However, since determining the dry residue is difficult during the ongoing reaction, but the pH value can be readily detected during the entire reaction time period, the reaction is terminated at a maximum of the pH value, which corresponds to a greatest extent with a maximum of the dry residue of biocoal.

(FIG. 1)