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 (54) Title: Method for oxidation of a liquid phase in a hydrothermal carbonization process
 (56) Cited documents: ---
 (57) Abstract:

There is provided a method of treatment of sludge, such as municipal or industrial sludge from a wastewater treatment plant, comprising the steps of:

- preheating an incoming sludge with at least one steam fraction, preferably by direct steam injection, to obtain a preheated sludge;
- further heating the preheated sludge with a high-temperature steam fraction, preferably by direct steam injection, to obtain a heated sludge;
- hydrothermal carbonization (HTC) of the heated sludge to obtain a HTC-treated sludge;
- separating a particle-lean fraction from the HTC-treated sludge;
- wet oxidation of the particle-lean fraction to obtain a heated particle-lean fraction;
- subjecting the heated particle-lean fraction to a first flashing to obtain the high-temperature steam fraction used in the further heating step;
- separating a particle-rich fraction from the HTC-treated sludge;
- subjecting the particle-rich fraction to flashing to obtain at least one steam fraction that is used in the preheating step and a cooled particle-rich fraction.

