

METHOD OF TREATING OIL SLUDGE AND AN APPARATUS FOR CARRYING OUT THE SAME

ABSTRACT

A method of treating oil sludge and an apparatus for carrying out the same for agitating oil sludge to which water is added in an electrolytic tank so as to facilitate liquefaction and to reduce separating load in a separator, whereby oil of good quality and inorganic harmless slag can be easily obtained. The method of treating oil sludge comprises agitating oil sludge to which water is added in an electrolytic tank so as to liquefy agitated oil sludge, extracting waste fluid including solid material from said liquefied oil sludge, separating solid material from said liquefied oil sludge by a centrifugal separator, extracting waste fluid including said solid material, leading the liquefied oil sludge to a precipitation tank, extracting waste fluid including solid material which is separated and precipitated in the precipitation tank, applying low frequency oscillation to said oil sludge in fluid supply tubes between said electrolytic tank, centrifugal separator and precipitation tank so as to increase oxygen content, extracting oil from an upper portion of the precipitation tank, and incinerating the extracted waste fluid including solid material by an incinerator. An apparatus for treating oil sludge comprises an agitator disposed inside an electrolytic tank, a first fluid supply tube connecting between the electrolytic tank and a centrifugal separator, a second fluid supply tube connecting between the centrifugal separator and a precipitation tank, an oil supply tube connecting between an upper portion of the precipitation tank and the oil tank, coils disposed middle on the first and second fluid supply tubes for applying low frequency/low voltage/low current signal, and extracting tubes respectively connected between the electrolytic tank, the centrifugal separator and the precipitation tank for extracting waste fluid including solid material, wherein the extracting tubes are respectively connected to the incinerator.