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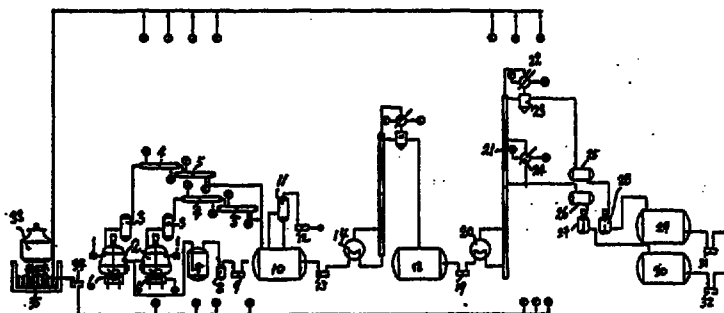
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(54) Title: PROCESS AND APPARATUS FOR TREATMENT OF WASTE PLASTIC HYDROCARBONS



(57) Abstract

Process for treatment of waste plastic hydrocarbons comprises catalytic cracking waste plastic in the presence of a catalyst at 280-480 °C, removing solid impurities from gaseous product by subsiding, then condensating, sending uncondensated gas to a furnace for combustion, separating resulting liquid to obtain gasoline and diesel which are stabilized to obtain the high quality products. The apparatus for carrying out the process includes hydraulically automatic feeder, reaction still, gas subcooler, two-stage condenser, collector and exhauster for tail gas, vacuum pump for removing sediment, heater, tank, fractionating tower, balance regulator, product storage tank, etc.

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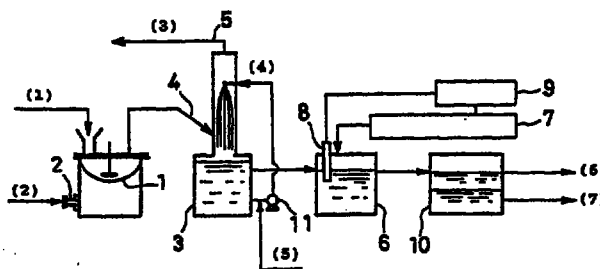
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(54) Title: APPARATUS FOR LIQUEFYING WASTE PLASTICS



- (1) ... waste plastics
(2) ... fuel
(3) ... decomposition gas
(4) ... cooling water
(5) ... make-up water
(6) ... recovered oil
(7) ... waste water
8 ... supply of alkali
9 ... pH adjustment

(57) Abstract

An apparatus for liquefying waste plastics which makes it possible to charge the waste plastics intact into a thermal decomposition tank without removing polyvinyl chloride in advance, is easy to handle, and can remove effectively and at a low cost the resulting detrimental decomposition gases and acidic components. This apparatus includes a waste plastic charging device for charging the waste plastics, which may contain chlorine type resins and nitrile type resins, into a thermal decomposition oven, the thermal decomposition oven for thermally decomposing the waste plastics so charged, a quenching column for cooling the oil vapor and the decomposition gases generated from the thermal decomposition oven with water, a neutralization tank for neutralizing cooling water used for cooling by an alkali, and an oil-water separation tank for separating the condensed oil and water contents.