

METHOD FOR PROCESSING HYDROCARBON PYROLYSIS EFFLUENT

Abstract

A method is disclosed for treating gaseous effluent from a hydrocarbon pyrolysis unit to provide steam cracked tar of reduced asphaltene and toluene insolubles content. The method is suitable for preparing reduced viscosity tar useful as a fuel blending stock, or feedstock for producing carbon black, while reducing or eliminating the need for externally sourced lighter aromatics additives to meet viscosity specifications. The method comprises drawing steam cracked tar from a separation vessel, e.g., a primary fractionator or tar knock-out drum, cooling the tar, and returning it to the separation vessel to effect lower overall tar temperatures within the separation vessel, in order to reduce viscosity increasing condensation reactions. An apparatus for carrying out the method is also provided.

Figure 1