

OPTIMIZED METHOD FOR PROCESSING PLASTIC PYROLYSIS OILS FOR IMPROVING THEIR USE

ABSTRACT

- 5 The present invention relates to a process for the treatment of a plastics pyrolysis oil, comprising:
- a) the selective hydrogenation of said feedstock in the presence at least of hydrogen and of at least one selective hydrogenation catalyst, at a temperature between 100 and 150°C, a hydrogen partial pressure between 1.0 and 10.0 MPa abs. and an hourly space velocity
- 10 between 1.0 and 10.0 h⁻¹, to obtain a hydrogenated effluent;
- b) the hydrotreating of said hydrogenated effluent in the presence at least of hydrogen and of at least one hydrotreating catalyst, at a temperature between 250 and 370°C, a hydrogen partial pressure between 1.0 and 10.0 MPa abs. and an hourly space velocity between 0.1 and 10.0 h⁻¹, to obtain a hydrotreating effluent;
- 15 c) a separation of the hydrotreating effluent in the presence of an aqueous stream, at a temperature between 50 and 370°C, to obtain at least one gaseous effluent, a liquid aqueous effluent and a liquid hydrocarbon effluent;
- e) the recycling of at least one fraction of the product obtained.

[Figure 1]