CLAIMS

1. The process for extracting fuel products from waste rubber, comprising the steps of:

(a) subjecting waste rubber to pyrolysis to produce a pyrolysis vapour;

(b) subjecting the pyrolysis vapour to a condensation step to produce a pyrolytic oil having a boiling point range of 45-400°C and a flash point below 25°C,;

(c) subjecting the pyrolytic oil to a vacuum steam stripping step at a pressure of less than 0.85 bar and with a temperature of less than 140°C at the top of the column, and recovering

a first component having a boiling point range starting from 140° C. under atmospheric pressure or higher and possessing the following properties:

a density at 15° C. of less than 990 kg/m3 determined according to ASTM D4052, a total acid number (TAN) of up to 12 determined according to ASTM D664,

a styrene content of less than 3000 ppm determined according to gas chromatography, and

an organic halogen (as Cl) content of less than 50 mg/kg determined according to IP510; and

a second component having an initial boiling point not exceeding 75° C. under atmospheric pressure and possessing the following properties:

a density at 15° C. of greater than 790 kg/m3 determined according to ASTM D4502,

a benzene content of at least 1.25 vol % determined according to ASTM D6839,

an existent gum (washed) content greater than 10 mg/100 ml determined according to ASTM D381,

an organic halogen (as Cl) content of less than 50 mg/kg determined according to IP510, and

a colour of no more than 5.0 determined according to ASTM D1500.

2. The process according to claim 1, wherein said first and second components together comprise at least 98 vol % of the total product obtained from the vacuum steam stripping step (c).

3. The process according to claim 1, wherein prior to the vacuum steam stripping step (c) the condensed pyrolytic oil is passed through a solids removal stage in order to reduce its solids content.

4. The process according to claim 1, wherein prior to the vacuum steam stripping step (c) the condensed pyrolytic oil is passed through a solids removal stage in order to reduce its solids content to less than 0.5 wt %.

5. The process according to claim 1 wherein the pyrolytic oil produced in (b) has a flash point below 18° C.

6. The process according to claim 1, wherein the waste rubber comprises waste tyres.

7. The process according to claim 1, wherein the first component has a biogenic carbon content of at least 15%, as determined according to ASTM D6866 Method B (AMS).

8. The process according to claim 1, wherein the second component has a biogenic carbon content of at least 15%, as determined according to ASTM D6866 Method B (AMS).