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(54) Title: HIGH PURITY PARAFFINIC SOLVENT COMPOSITIONS, AND PROCESS FOR THEIR MANUFACTURE

(57) Abstract

Discloses high purity solvent compositions constituted of n-paraffins and isoparaffins, with the isoparaffins containing predominantly methyl branches, and having an isoparaffin:n-paraffin ratio sufficient to provide superior low temperature properties and low viscosities. The solvent compositions are made by a process wherein a waxy, or long chain paraffinic feed, especially a Fischer-Tropsch wax, is reacted over a dual function catalyst to produce hydroisomerization and hydrocracking reactions at 700 °F+ conversion levels ranging from about 20 to 90 wt.% to provide a C_5-1050 °F crude fraction. The C_5-1050 °F crude fraction is then topped via atmospheric distillation to produce a low boiling fraction with an upper end point boiling between about 650 °F and 750 °F. The low boiling fraction is fractionated and a narrow boiling range solvent obtained therefrom; one which can be further divided into solvent grades of various boiling ranges.