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(71) Applicant: NESTE OYJ [FI/FI]; Keilaranta 21, 02150 Espoo (FI).

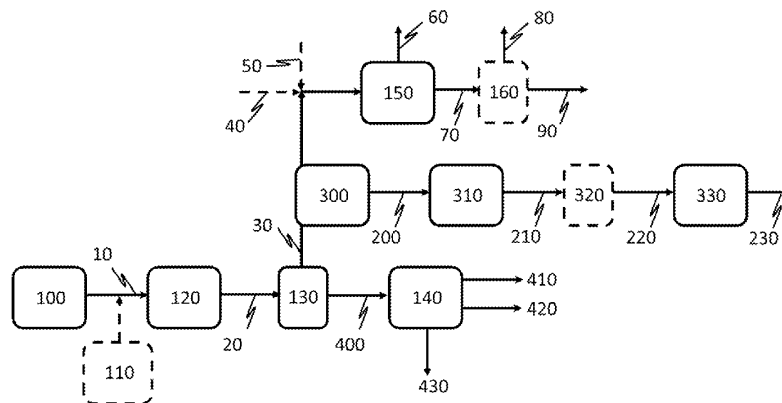
(72) Inventors: PESONEN, Antto; c/o Neste Oyj/IPR, P.O. Box 310, 06101 Porvoo (FI). BERG, Mika; c/o Neste Oyj/IPR, P.O. Box 310, 06101 Porvoo (FI). SUURONEN, Markus; c/o Neste Oyj/IPR, P.O. Box 310, 06101 Porvoo (FI). LEHTOVAARA, Anssi; c/o Neste Oyj/IPR, P.O. Box 310, 06101 Porvoo (FI). IKONEN, Jussi; c/o Neste Oyj/IPR, P.O. Box 310, 06101 Porvoo (FI).

(74) Agent: KOLSTER OY AB; (Salmisaarenaukio 1), P.O. Box 204, 00181 Helsinki (FI).

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(54) Title: PROCESS AND SYSTEM FOR PRODUCING HYDROCARBONS HAVING BIOGENIC CARBON CONTENT, A SAMPLE TREATMENT AND ANALYSIS SYSTEM AND USE THEREOF

Figure 2



(57) Abstract: A process for producing hydrocarbons having biogenic carbon content and a sweetened gas stream is provided. In the process a refinery feed having biogenic carbon content, non-biogenic carbon content and sulphur content is refined in a conversion unit to obtain a conversion effluent, wherefrom a gaseous stream comprising H<sub>2</sub>S and at least one or more of carbon oxide(s) and/or C<sub>1</sub>-C<sub>3</sub> hydrocarbons, and a degassed hydrocarbon stream are separated. The separated gaseous stream is subjected to a sweetening treatment, and optionally at least one or more distillate(s) and a fractionation bottom are further separated from the degassed hydrocarbon stream. The process further comprises collecting an aliquot of the gaseous stream as a sample, subjecting the sample to a selective H<sub>2</sub>S removal treatment and optionally to drying, and subjecting at least a portion of the selectively H<sub>2</sub>S depleted and optionally dehydrated sample to a biogenic carbon content determination. The present process provides a convenient and safe way to conduct the mass balancing, and biogenic carbon content determination in an output stream, for individual conversion units of a refinery, as required e.g. for an ISCC PLUS certification.

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