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(71) Applicant *(for all designated States except US)*: **SHELL OIL COMPANY** [US/US]; One Shell Plaza, P.O. Box 2463, Houston, TX 77252-2463 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **BROWNSCOMBE, Thomas, Fairchild** [US/US]; 2737 Amherst, Houston, TX 77005 (US). **WELLINGTON, Scott, Lee** [US/US]; 5109 Aspen Street, Bellaire, TX 77401 (US).

(74) Agent: **LEMUTH, Richard, F.**; Shell Oil Company, One Shell Plaza, P.O. Box 2463, Houston, TX 77252-2463 (US).

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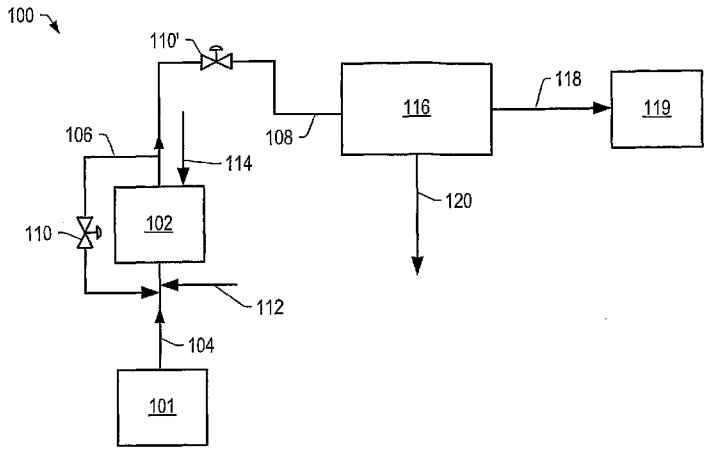
(54) Title: SYSTEMS AND METHODS OF PRODUCING A CRUDE PRODUCT



(57) Abstract: Contact of a crude feed with one or more catalysts produces a total product that includes a crude product. The crude feed has a residue content of at least 0.2 grams of residue per gram of crude feed. The crude product is a liquid mixture at 25 °C and 0.101 MPa. One or more properties of the crude product may be changed by at least 10 % relative to the respective properties of the crude feed. In some embodiments, gas is produced during contact with one or more catalysts and the crude feed.

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