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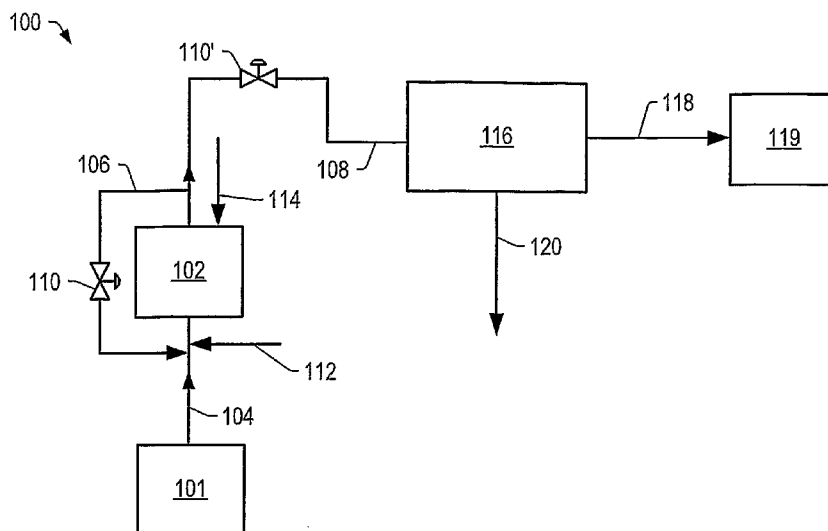
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(54) Title: SYSTEMS AND METHODS OF PRODUCING A CRUDE PRODUCT



(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.

WO 2005/061671 A3