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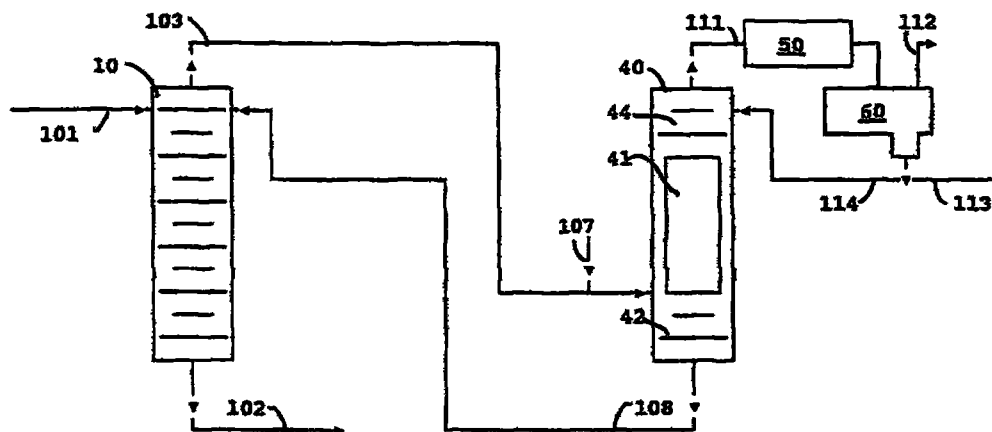
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(54) Title: PROCESS FOR THE SEPARATION OF ISOBUTENE FROM NORMAL BUTENES



(57) Abstract: A process for the separation of isobutene, otherwise inseparable from butene-1 by fractionation, in high purity from butenes contained in a mixed hydrocarbon stream containing butene-1, butene-2 and small amounts of butadiene in which the mixed hydrocarbon stream (107) is fed to distillation column reactor (40) containing an alumina supported palladium oxide catalyst. The column is operated to tend to exclude butene-2 from contact with the catalyst and to maintain butene-1 in contact with the catalyst to isomerize the butene-1 to butene-2. As butene-2 is produced it is distilled away from the catalyst, upsetting the equilibrium and allowing for a greater than equilibrium amount of butene-2. The isobutene and isobutane are concurrently separated from butene-2. Additionally, any butadiene in the feed is hydrogenated to butenes. The bottoms (108) is rich in butene-2.

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