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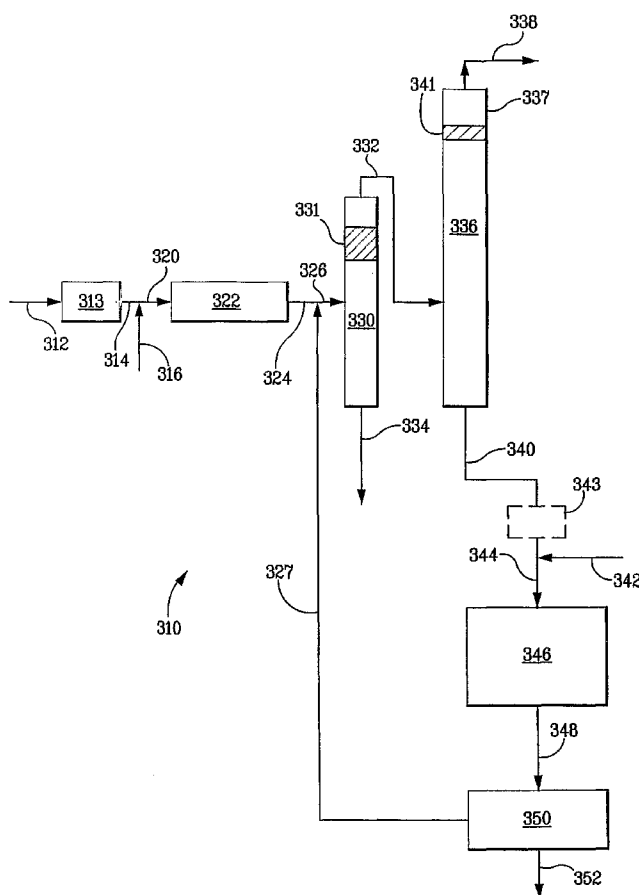
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(54) Title: DOUBLE BOND HYDROISOMERIZATION OF BUTENES



(57) Abstract: A process is disclosed for the preferential conversion to 2-butene of a C4 stream containing 1-butene and 2-butene. The process involves mixing the C4 stream with a first hydrogen stream to form a feed stream, hydroisomerizing the feed stream in the presence of a first hydroisomerization catalyst in order to convert at least a portion of the 1-butene to 2-butene, thereby producing a hydroisomerization effluent, separating the hydroisomerization effluent in a fractionation column having an upper end and a lower end to form a 1-butene mixture at the upper end, a top effluent stream containing isobutane and isobutylene and a bottoms stream containing 2-butene, and hydroisomerizing the 1-butene mixture at the upper end of the column using a second hydroisomerization catalyst. A corresponding apparatus also is disclosed.



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