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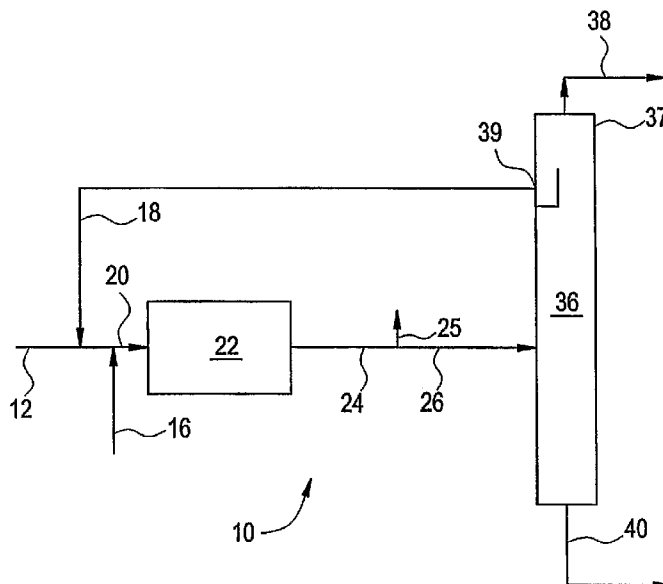
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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

[Continued on next page]

(54) Title: PROCESS FOR THE DOUBLE BOND HYDROISOMERIZATION OF BUTENES



(57) Abstract: A process is disclosed for the preferential conversion to 2-butene of a stream containing C4 compounds including 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, passing the hydroisomerization effluent through a fractionation column to form a top stream comprising isobutane and isobutylene and a bottoms stream comprising 2-butene, withdrawing a recycle stream from said fractionation column at a location above the feed point at which the weight ratio of 1-butene to 2-butene is high, and combining the recycle stream with at least one of the C4 stream and the feed stream upstream from the hydroisomerization catalyst. A corresponding apparatus also is disclosed.

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