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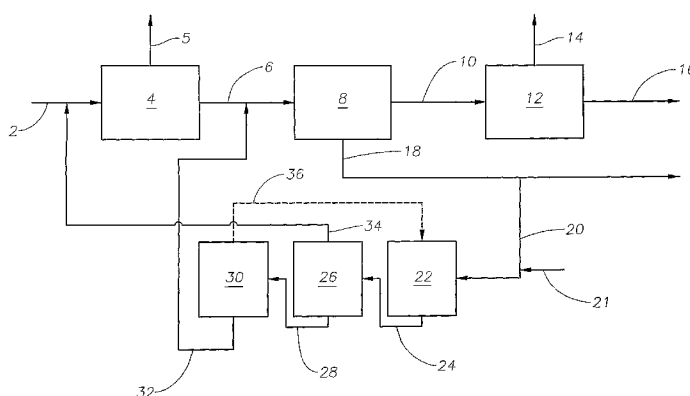
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(54) Title: PROCESS FOR ALCOHOL PRODUCTION BY SELECTIVE ETHER DECOMPOSITION



(57) Abstract: This invention relates to a process for the production of an alcohol, the process comprising (a) reacting an olefin and water in the presence of a catalyst under conditions sufficient to form a crude alcohol stream comprising alcohol, and a dialkyl ether; (b) separating at least a portion of the crude alcohol stream into an alcohol-containing stream and a dialkyl ether stream; (c) contacting at least a portion of the dialkyl ether stream with an ether decomposition catalyst, the ether decomposition catalyst comprising a mixed metal oxide having the following composition $X_mY_nZ_pO_q$ where X is at least one metal selected from Group 4 of the Periodic Table of Elements, Y is at least one metal selected from Group 3 (including the Lanthanides and Actinides) and Group 6 of the Periodic Table of Elements and Z is at least one metal selected from Groups 7, 8, and 11 of the Periodic Table of Elements; m, n, p, and q are the atomic ratios of their respective components and, when m is 1, n is from about 0.01 to about 0.75, p is from 0 to about 0.1, and q is the number of oxygen atoms necessary to satisfy the valence of the other components, to form a crude dialkyl ether decomposition stream comprising alcohol and olefin; (d) recovering at least a portion of the olefin from the crude dialkyl ether decomposition stream; and (e) recycling at least a portion of the olefin recovered in step (d) to step (a).

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