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- (54) Title: PROCESS FOR THE CONTINUOUS PRODUCTION OF ETHYLENE GLYCOL FROM CARBOHYDRATES

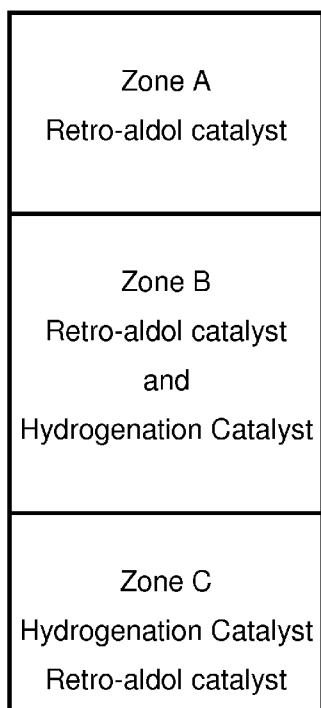


FIG. 1

(57) Abstract: A continuous process for converting carbohydrates to ethylene and propyl-
ene glycol. The carbohydrates are mixed with water and passed through a reactor at a tem-
perature that hydrolyzes the carbohydrate mixture at least partially to monosaccharides.
The reactor has a first zone comprising a retro-aldol catalyst and a second zone comprising
a reducing catalyst. The aldose is converted in the first zone into glycolaldehyde by the
retro-aldol catalyst and the glycolaldehyde, in the presence of hydrogen, is converted to
ethylene glycol in the second zone of the reactor. The reaction products are removed from
the reactor and the ethylene glycol is recovered. The selectivity to propylene glycol can be
enhanced via feeding ketose as the carbohydrate.



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