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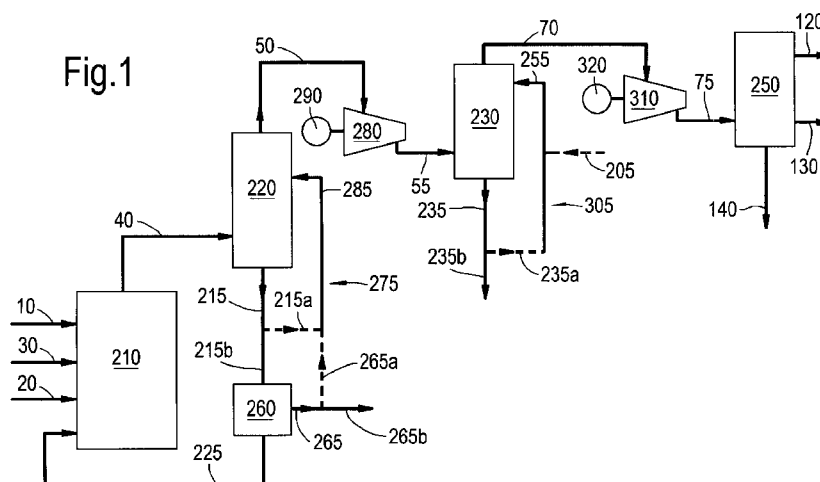
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[Continued on next page]

(54) Title: OXYGENATE-TO-OLEFINS PROCESS AND AN APPARATUS THEREFOR



(57) Abstract: The present invention relates to a process for the preparation of an olefinic product, such as one or both of ethylene and propylene, from an oxygenate feedstock, such as methanol, and an apparatus therefore, said process comprising: treating an effluent stream with a carbonyl compound absorbent stream comprising an aqueous solution of bisulphite having a pH in the range of from 4 to 8, to provide an olefinic product stream comprising olefin and a loaded carbonyl compound absorbent stream comprising an aqueous solution of at least one carbonyl adduct comprising one or both of C2+ aldehyde adduct and ketone adduct and optionally unreacted bisulphite, said liquid absorbent stream and loaded carbonyl compound absorbent stream in a carbonyl compound absorbent circuit separate from the effluent separation circuit.

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