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(54) Title: CATALYTIC PROCESSES FOR PRODUCTION OF OLEFINS, PARAFFINS, AND/OR AROMATICS FROM MIXTURES OF NATURAL OILS, AND/OR FATS

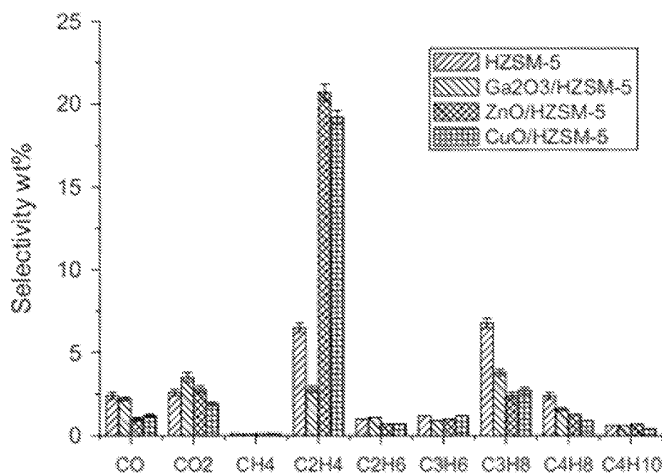


FIG. 1

(57) Abstract: Processes for converting one or more bio-oil(s) with or without co-feeding C₁-C₅ alcohols and/or water to one or more C₂-C₅ olefins and/or one or more aromatics are provided. In one exemplary aspect, the process can be a single stage process for the direct conversion of bio-oil(s) to olefinic (e.g., C₂-C₅) and aromatic (e.g., BTEx) mixtures carried out in a reactor using one or more catalysts that include a zeolite doped with one or more dopants and a doped or undoped alumina catalyst. Systems for carrying out these processes are also provided.

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