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(54) Title: IMPROVED PROCESS FOR PRODUCING LOWER OLEFINS FROM HYDROCARBON FEEDSTOCK UTILIZING PARTIAL VAPORIZATION AND SEPARATELY CONTROLLED SETS OF PYROLYSIS COILS

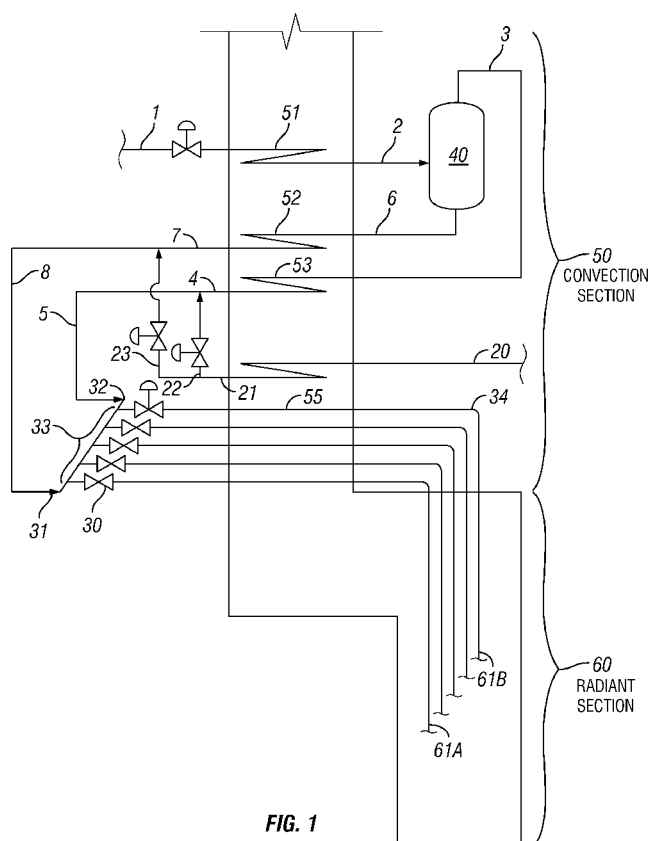


FIG. 1

(57) Abstract: A process for making lower olefins from a wide boiling range hydrocarbon feed by use of a combination of one or more vapor/liquid separation devices (40), and then pyrolytically cracking the vapor phase in separate sets of pyrolysis radiant tubes (61), thereby producing a higher level of lower olefin product. The particular set of radiant pyrolysis coils (61) associated with the particular feed fraction are matched to achieve specific target cracking severity in order to enhance the overall production of C2 and C3 mono-olefins or optimize yields for overall improved profitability.



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