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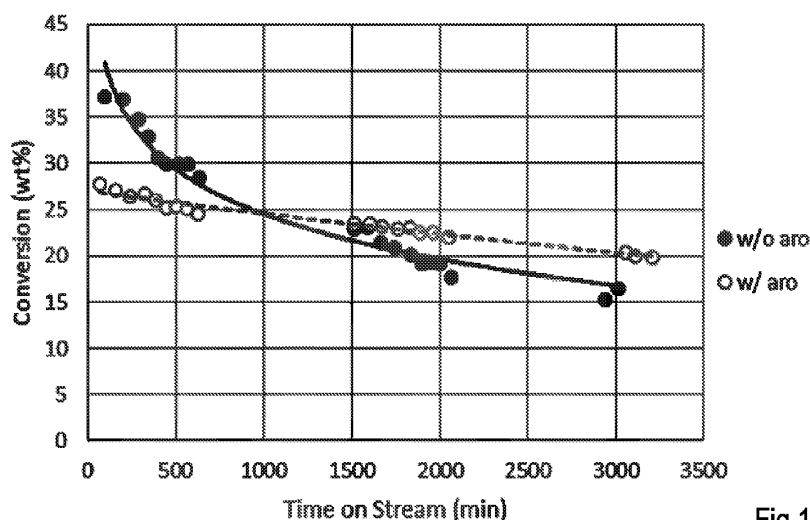


Fig.1

(57) **Abstract:** The invention is directed to a process to prepare propylene from a mixture of hydrocarbons having an olefin content of between 5 and 50 wt.% and boiling for more than 90 vol.% between 35 and 280 °C or from a hydrocarbon feed comprising paraffins, naphthenics and/or aromatics and optionally up to 10 wt.% of olefins, by first contacting the feed with a low acidic density cracking catalyst in a reactor, separating propylene and subsequently contacting the residue with a high acidic density cracking catalyst in a reactor at a more elevated temperature, separating propylene and recycling the residue to first and second cracking reactors. Aromatics may be added to first and second cracking step to improve cycle length.

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