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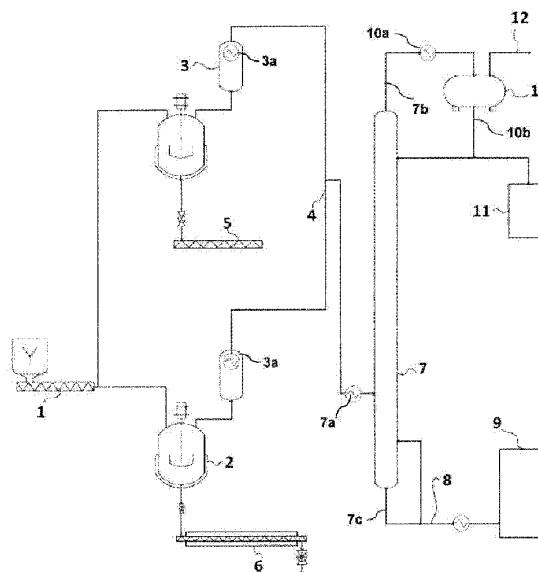


FIG 1

(57) Abstract: The present invention is related to a process for thermal cracking of a feedstock of plastic materials, in particular waste materials, comprising the steps of melting the feedstock, conveying melted feedstock in a pyrolysis chamber (2) where said melted feedstock is heated in a substantially oxygen purged environment, to convert it into pyrolysis gases, said process further comprising the steps of: · driving pyrolysis gases from the pyrolysis chamber (2) into a tray reflux column (3) comprising a partial condenser (3a) at its upper extremity, · returning pyrolysis gases condensed in the tray reflux column into the pyrolysis chamber (2), · distilling pyrolysis gases (4) exiting the partial condenser of the reflux column, to provide one or more fuel products.

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