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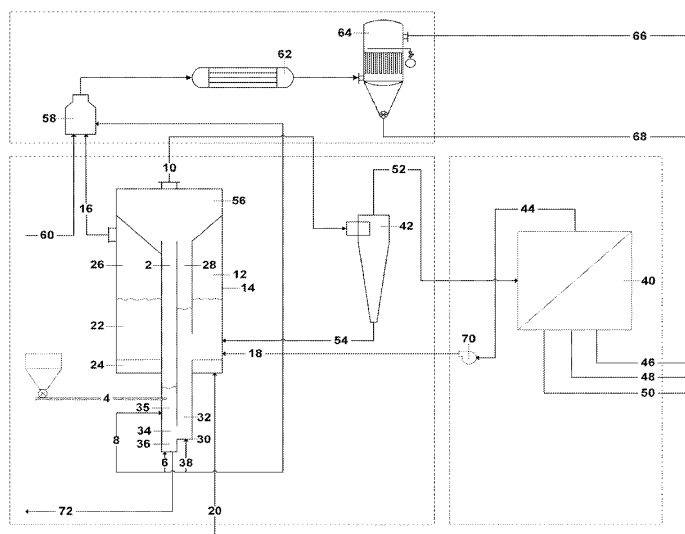
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(54) Title: METHOD FOR DEPOLYMERISING POLYMERS INTO ONE OR MORE MONOMERS

Figure 1



(57) Abstract: Method for depolymerising polymers into one or more monomers. A fluidised reactor system is provided comprising a pyrolysis chamber (2), a combustion chamber (12), and bed material that circulates from the combustion chamber (12) to the pyrolysis chamber (2) via a transport zone (30). A feedstock comprising 60% or more polymers by weight of the feedstock is inputted into the pyrolysis chamber (2) and a pyrolysis process is executed at a temperature in the range of from 450 to 650°C in the bed material to provide a depolymerised polymer product gas comprising the monomers. Circulation of the bed material allows for sufficient heat to be transferred from the combustion chamber (12) to the pyrolysis chamber (2) to execute the pyrolysis process.

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