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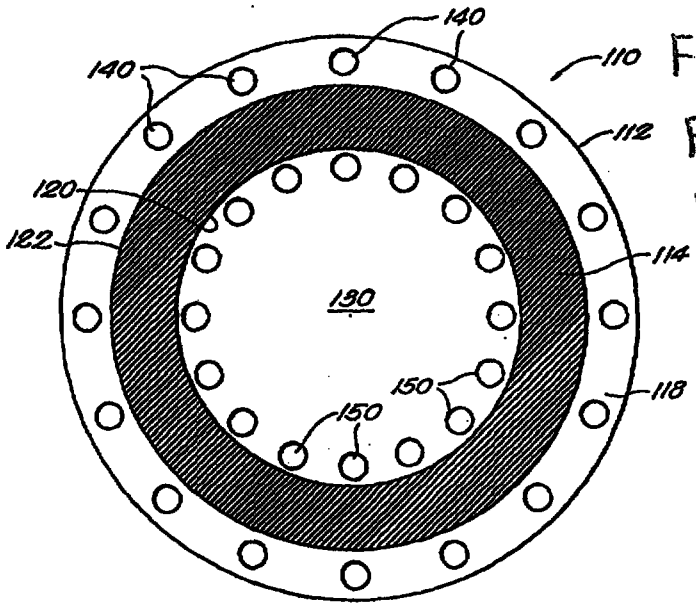
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(57) Abstract

Apparatus for a radial flow reactor and methods of using the reactor for catalytic hydrocarbon processing. The reactor (110), of annular shaped housing (112), contains a core region (130) with a heat exchange means (150). The core region (130) is surrounded by a catalyst bed (114) held by inner and outer walls (120 and 122 respectively). The core region (130) and radial catalyst bed (114) are further surrounded by an annular zone (118) containing heat exchange means (140).