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(54) Title: FILTRATION DEVICE FOR A DOWN-FLOW HYDROPROCESSING REACTOR

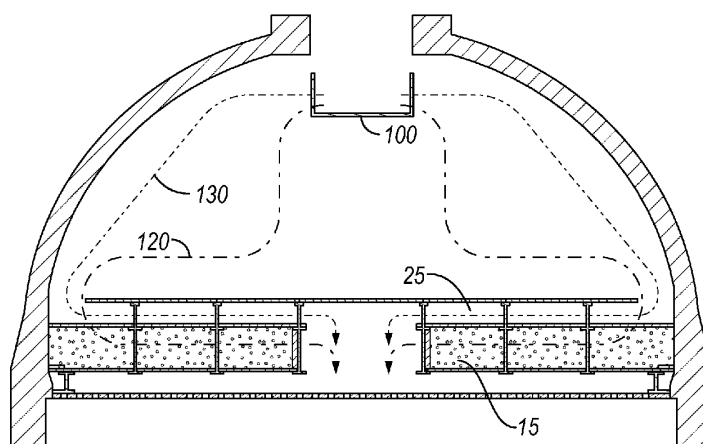


FIG. 3

(57) **Abstract:** A filtration device for a down-flow catalytic hydroprocessing reactor is disclosed. The filtration device may be used in the petroleum and chemical processing industries in catalytic reactions of hydrocarbonaceous feedstocks in the presence of hydrogen, at an elevated temperature and pressure, to remove contaminants from mixed gas and liquid feedstreams to reactor catalyst beds. The filtration device may be provided as a horizontal tray installation at the top of a reactor, whereby feedstream liquid is passed through a filtration media in a radially inward direction from the wall of the reactor to the center of the filtration device and thereafter to the reactor catalyst bed. Among the benefits provided are the minimization of scale and small/fine particulates that reach the catalyst bed below the device, reduced pressure drop through the reactor, even when the filter is completely fouled, and the potential for added catalyst volume due to the reduced need to use catalyst grading materials.

[Continued on next page]

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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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