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(54) Title: ROTARY FEEDSTOCK PROCESSING APPARATUS WITH AN AXIALLY ADJUSTABLE ROTOR

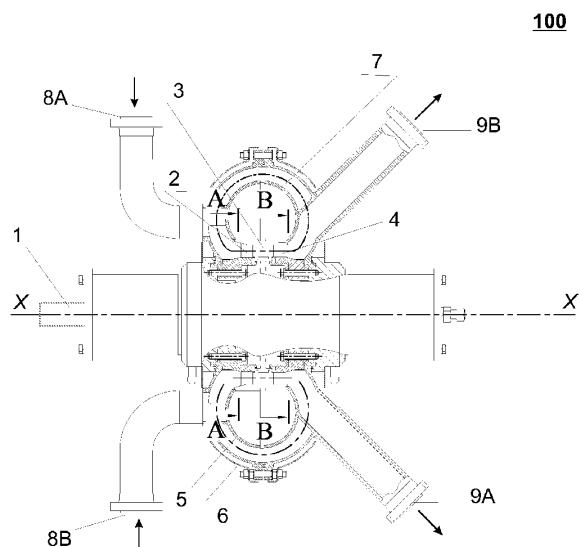


Figure 6A

(57) Abstract: A rotary bladed apparatus (100) for processing feedstocks in a process fluid is provided, said apparatus comprises means for adjusting position of a working blade cascade of the rotor (3) relative to stator components (2, 4) in a longitudinal direction of a rotor shaft (1). Adjustment is performed through axial displacement of the rotor (3) or, alternatively, through axial displacement of the reactor housing (22 A, 32A). A method for improving process efficiency and for regulating flow losses during processing of feedstocks in a process fluid, in particular, in off-design conditions in the bladed apparatus (100) is further provided. In embodiments, processing of feedstocks includes thermal- or thermochemical cracking of hydrocarbon-containing feedstock.

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