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(54) Title: ROTARY BED SORPTION SYSTEM INCLUDING RECYCLED ISOLATION LOOP AND PURGE/REGENERATION LOOP

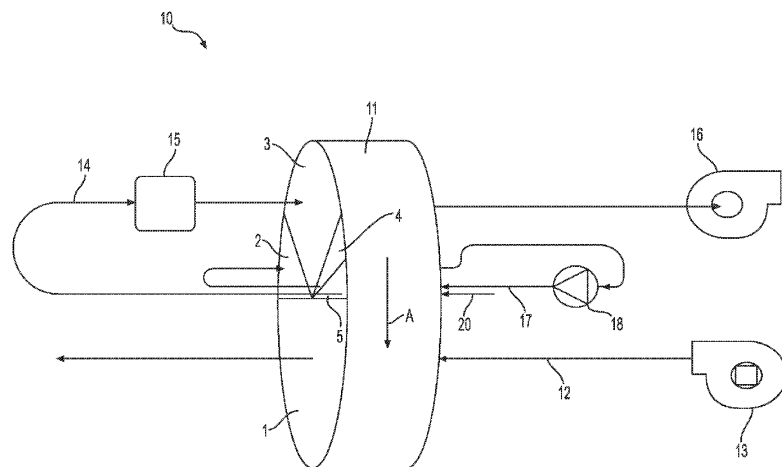


FIG. 1

(57) Abstract: A rotary sorption bed system includes a rotating sorbent mass of a regenerable sorbent material, in a cycle of operation, a given volume of the sorbent mass sequentially passing through first, second, third, fourth, and fifth zones, before returning to the first zone; a process fluid stream directed through the first zone; a regeneration fluid stream directed through the third zone; and an isolation fluid stream that recirculates in a closed loop independent of the process fluid stream and the regeneration fluid stream through the second and fourth zones. The regeneration fluid stream passes through the fifth zone before passing through the third zone.

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