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(54) Title: METAL ORGANIC FRAMEWORK BASED WATER CAPTURE APPARATUS

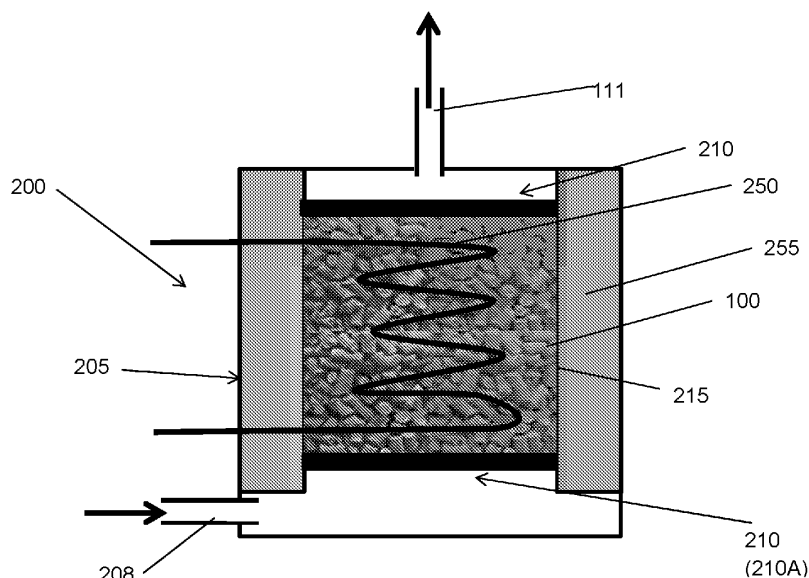


Figure 1A

(57) Abstract: An apparatus for capturing a water content from a water containing gas, the apparatus comprising: a housing having an inlet into which the water containing gas can flow; a water adsorbent located in the housing, the water adsorbent comprising at least one water adsorbent metal organic framework composite capable of adsorbing a water content from the water containing gas; and a water desorption arrangement in contact with and/or surrounding the water adsorbent, the water desorption arrangement being selectively operable between (i) a deactivated state, and (ii) an activated state in which the arrangement is configured to apply heat, a reduced pressure or a combination thereof to the water adsorbent to desorb a water content from the water adsorbent.

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