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(54) Title: INTEGRATED CYCLONE ASSEMBLY

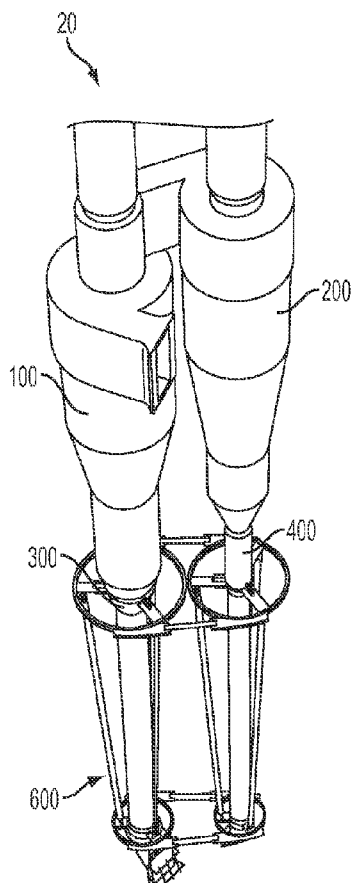


FIG. 3

(57) Abstract: integrated primary and secondary cyclone assembly includes a secondary cyclone having an outlet tube extending therefrom and a primary cyclone operatively coupled with the secondary cyclone. The outlet tube has a cross dimension and length and is configured to be secured to a pressure vessel closure head to support the secondary cyclone therefrom. The primary cyclone has a tubular support member extending therefrom. The tubular support member is aligned substantially parallel with and has a length similar to the outlet tube of the secondary cyclone and is configured to be joined to the pressure vessel closure head to support the primary cyclone therefrom.



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