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(54) Title: CYCLONE

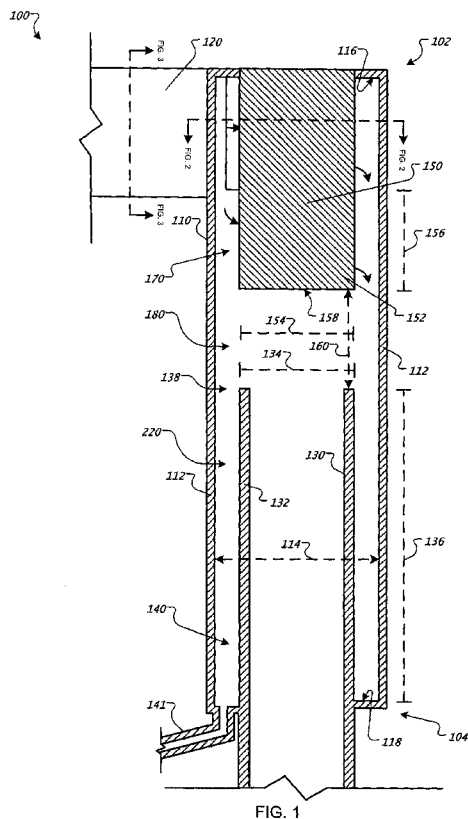


FIG. 1

(57) Abstract: A cyclone includes a cylindrical housing and has an inner diameter D. An inlet is near a first end of the housing. A deflection member can be positioned within the first end or the second end of the housing, depending on whether the cyclone is uniflow or reverse flow. An outlet tube is positioned within and extends from a second end or the first end of the housing (depending on whether uniflow or reverse flow). A bunker is formed between the outlet tube and an inner wall of the housing in a uniflow design and between the deflection member and the housing in a reverse flow design, and collects particles separated from an inlet gas stream. A gap between the deflection member and the outlet tube has a length in the range of approximately  $0.4 \cdot D$  to  $0.8 \cdot D$ . The length of the bunker is approximately greater than or equal to  $1.5 \cdot D$ .



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