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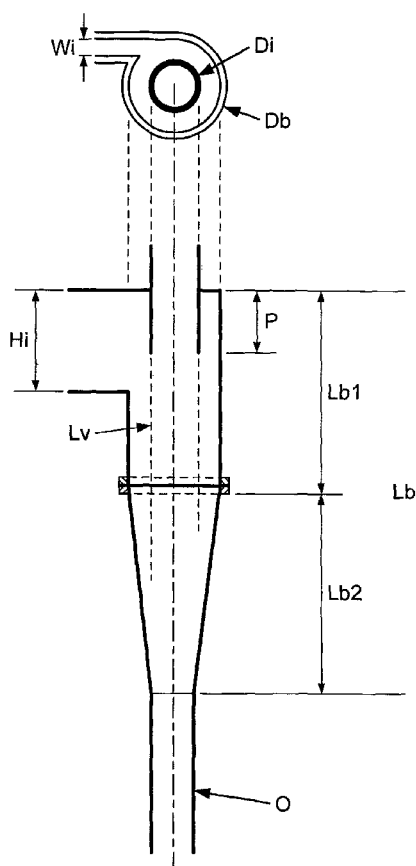
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(54) Title: SEPARATION OF GASES AND SOLIDS USING A CYCLONE



(57) Abstract: Cyclone design comprising an inlet device having an inlet height (H_i) and an inlet width (W_i), a gas outlet pipe having a pipe diameter (D_i) and a pipe penetration (P), a barrel having an upper barrel diameter (D_b) and a barrel length (L_b), said barrel comprising a cylindrical volume on top of a conical volume, a solids outlet pipe (O), an inlet gas velocity ($U_{g,i}$) and an inlet gas flow (Q), characterised in that the ratio of the inlet gas flow to the square of the upper barrel diameter (Q / D_b^2) is higher than 0.5, preferably higher than 0.7, and lower than 1.5, preferably lower than 1.2 (m/s) and in that the barrel length to diameter ratio (L_b/D_b) is higher than 3, preferably higher than 3.5, and lower than 6, preferably lower than 4.5.

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**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,

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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations
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