ABSTRACT OF THE DISCLOSURE

PNEUMATIC CONVEYANCE SYSTEM FOR REFUSE AND RECYCLABLES FROM URBAN DEVELOPMENTS

A pneumatic conveyance system for refuse and recyclables from urban developments is disclosed. The pneumatic conveyance system comprises (a) a discharge room (48) including an air intake valve (9) and a refute/recyclables chute (47), and a plurality of discharge valve rooms (46), wherein the refuse chute (47) is connected to a plurality of refuse/recyclables hoppers; (b) a piping assembly including a conveyance pipe (80), a recirculating air pipe (10), and an exhaust air pipe (50); wherein the discharge valve (75) and the air intake valve (9) are connected to the conveyance pipe (80); (c) a bin centre (20) housing a filter container/compactor/primary separator (21) and the exhaust air pipe (50); (d) an exhauster (52) wherein the exhaust air pipe (50) connects the filter container/compactor/primary separator (21) to the exhauster (52), and the exhaust air pipe (50) leaving from the exhauster (52) is linked to the recirculating pipe (50) to be connected to the conveyance pipe (80) in the discharge rooms (48, 46) for recirculation of exhaust air; and (e) an air treatment room (54) an air treatment room (54) including a plurality of dust filters (55), a plurality of carbon filters (56) and a plurality of UV lightings means to treat air from the exhaust air pipe (50) via the regulating valve (79) before the air is released to the surrounding via an out flow pipe (88) linked to the treatment room (54), thereby the exhaust air from the exhauster (52) is partially/fully recirculate back to the conveyance pipe (80) and only partial/zero of the exhaust air is treated in the air treatment room (54) to be released to the surrounding.

(FIG. 1)