ABSTRACT

METHOD AND APPARATUS FOR TRANSFORMING ORGANIC AND INORGANIC SOLID URBAN WASTE INTO AGGREGATES

Method and apparatus (100) for transforming organic and inorganic solid urban waste into aggregates, comprising an extruding machine connected to a reactor. The extruding machine is formed by an extrusion cylinder (103) through which a piston circulates (104) inside an extrusion cavity (106), which comprises three sections (107, 110, 111) and is fed with a parget obtained after pre-processing the waste. The end (115) of the third section (111) is connected to the reactor (112) through an opening (114). The reactor's longitudinal shaft is formed by a rotatory steel shaft (116) in which some steel blades are arranged (108), whose ends play the roles of cutting, hammering, punching and hydraulic helix as they rotate. Between the end of the blades and the wall of the reactor, there is a clearance of more than 0,1 mm of thickness. The reactor has a discharge valve (300) to discharge the parget present in the boundary area through some openings (304), once it has been processed by a series of pressure, vibration energy and decompression cycles.

(Fig. 1)