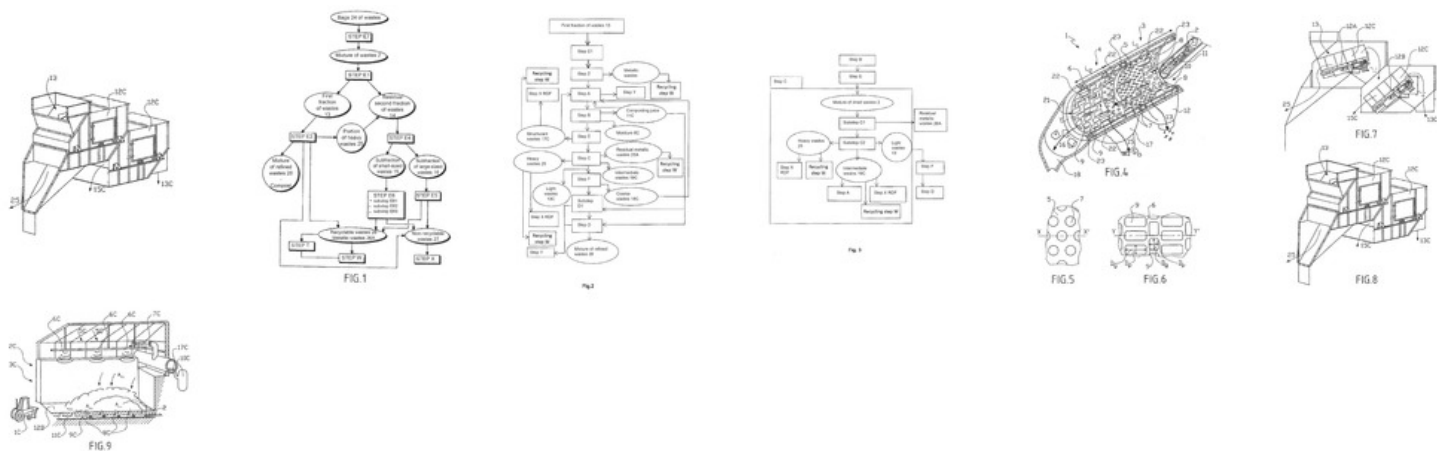
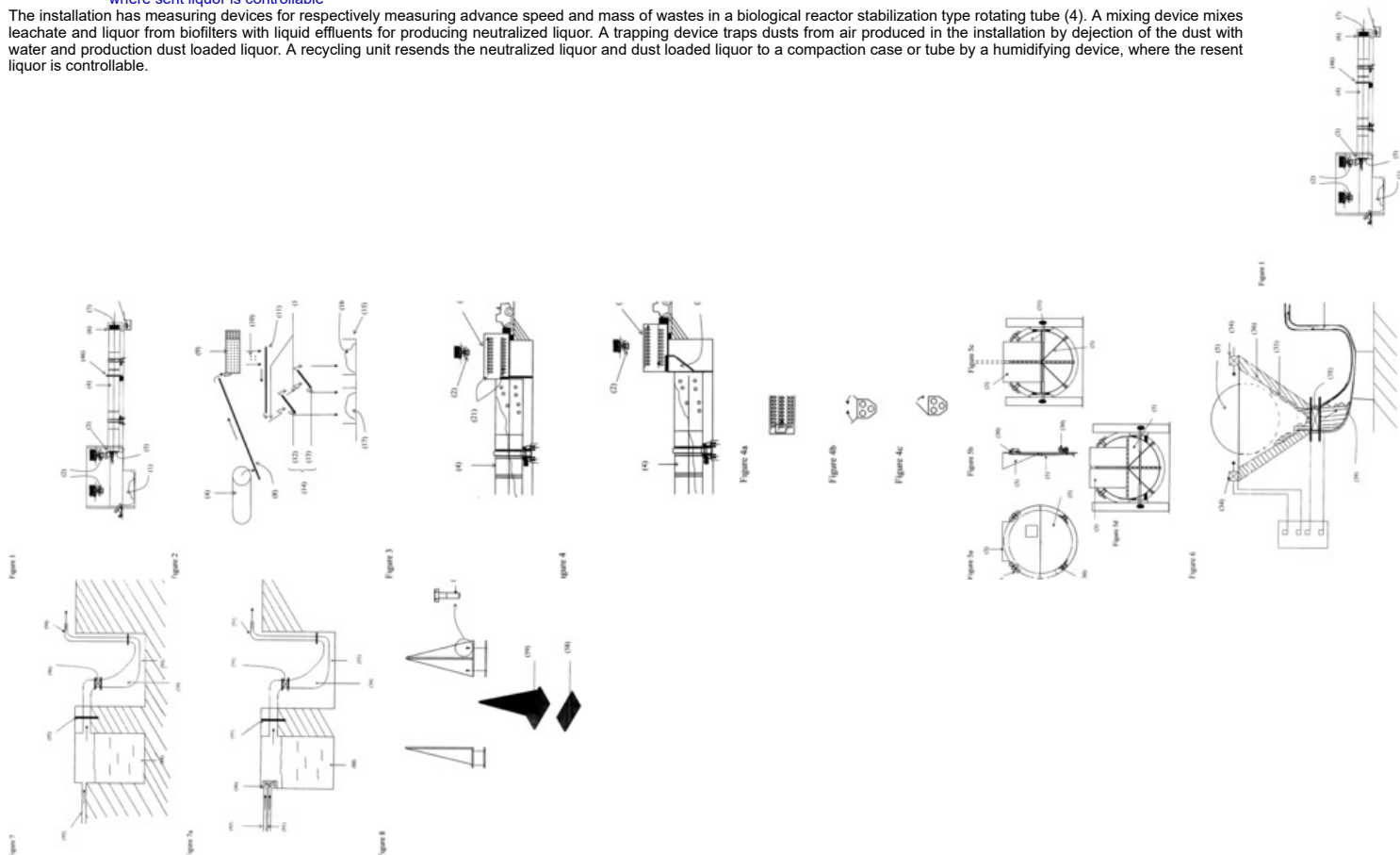
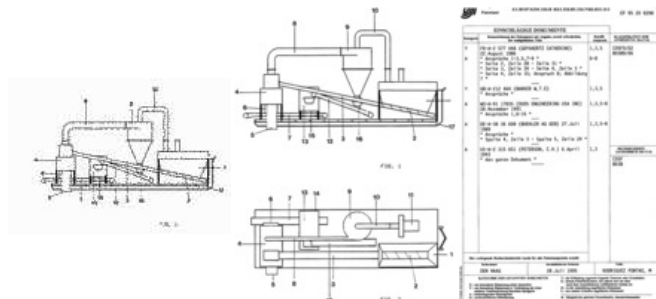
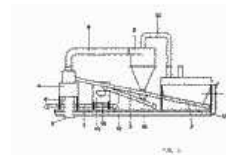




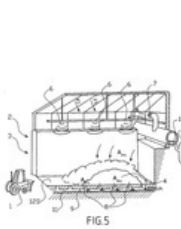
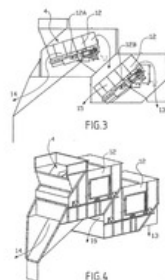
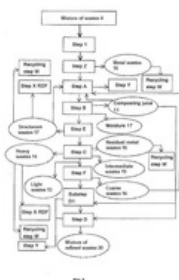
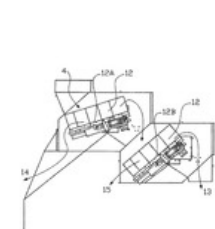
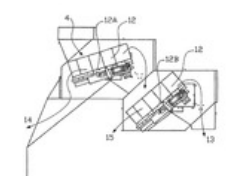
- The installation has measuring devices for respectively measuring advance speed and mass of wastes in a biological reactor stabilization type rotating tube (4). A mixing device mixes leachate and liquor from biofilters with liquid effluents for producing neutralized liquor. A trapping device traps dusts from air produced in the installation by dejection of the dust with water and production dust loaded liquor. A recycling unit resends the neutralized liquor and dust loaded liquor to a compaction case or tube by a humidifying device, where the resent liquor is controllable.



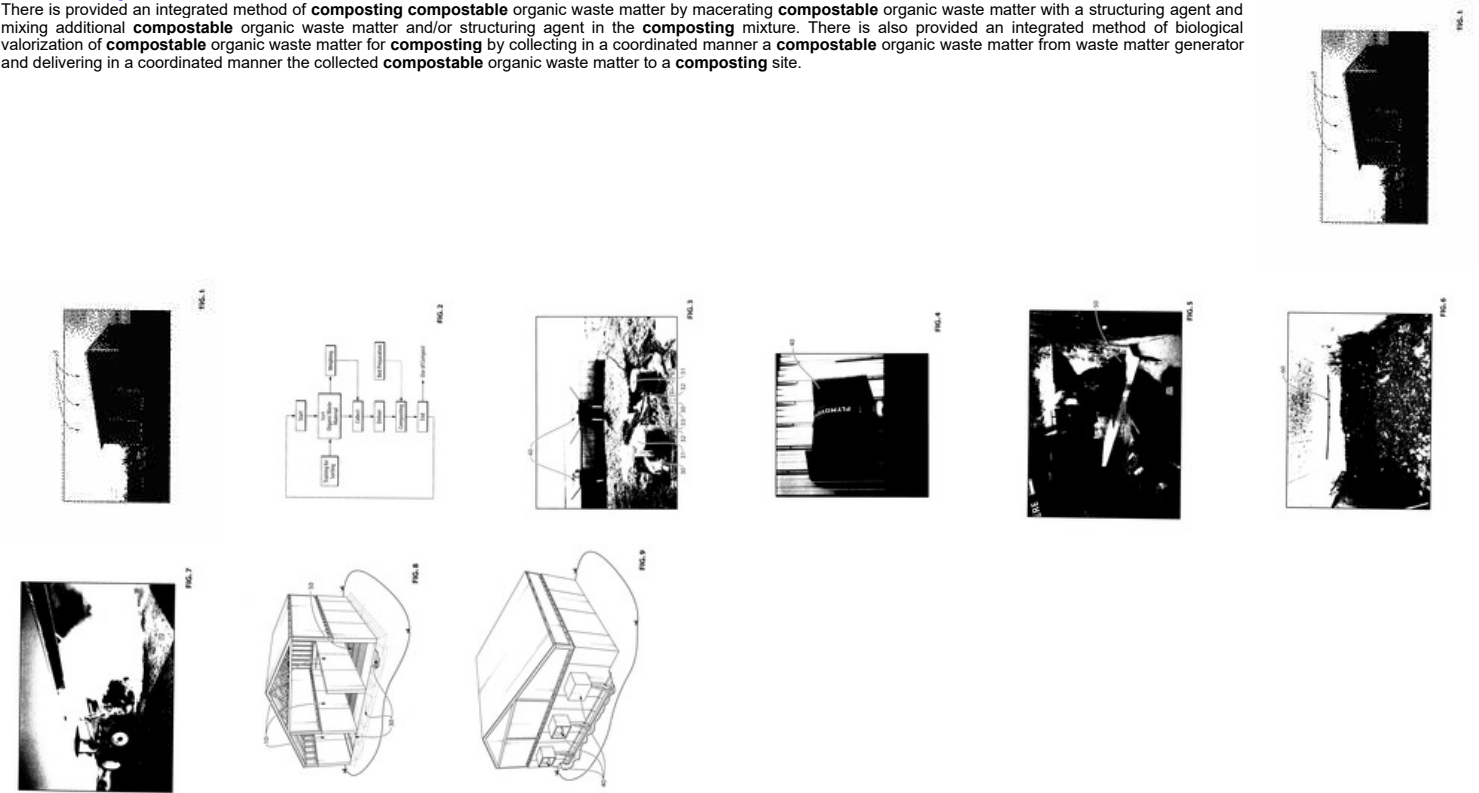
The appts., for the **separation** of hard and soft material from composed material, has a feed funnel (1) and a dosing screw (2) leading to an initial conveyor (3) to carry the material to a hard matter detector (4). At the hard matter detection station (4), the hard matter passes through an outlet (5) and the cleared material passes through another outlet (6) to a second conveyor (7). A channel (8) from the hard matter detection station (4) leads to a **separator** (9) which has a channel (10) from a fan (11). The outlet from the **separator** (9) is linked to a further conveyor (12) leading to a foil **sieve** (13) with one outlet and a further outlet to the second conveyor (7). Also claimed is a process where the **compost** material is fed in a consistent dosing action for the hard and soft material fractions to be **separated**. The dust **separated** from the soft material fraction is returned to the **compost** material.



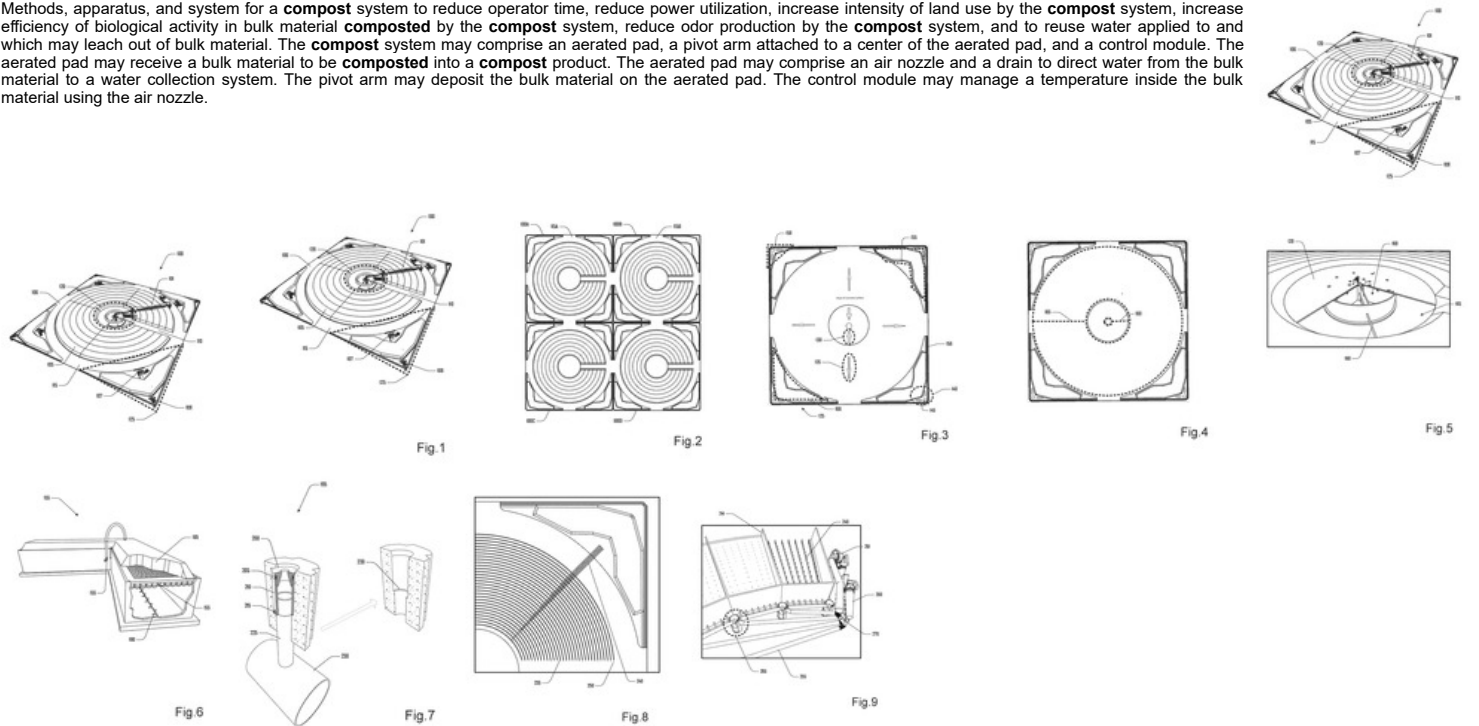
- The invention relates to an installation and a method for treating a mixture of waste (4) comprising biodegradable waste, the method being characterized in that it comprises the following successive steps: - Step A: the mixture of waste (4) is subjected to a first **composting** cycle so as to obtain a mixture of pre-**composted** waste (4), - Step B: the mixture of pre-**composted** waste (4) is dried in order to obtain a mixture of dried waste (4), - Step C: the mixture of dried waste (4) is **separated** into at least one portion of heavy waste (14) and one portion of light waste (13), - Step D: the portion of light waste (13) is subjected to a second **composting** cycle so as to obtain a mixture of refined waste (4; 20). - Treatment of biodegradable waste.



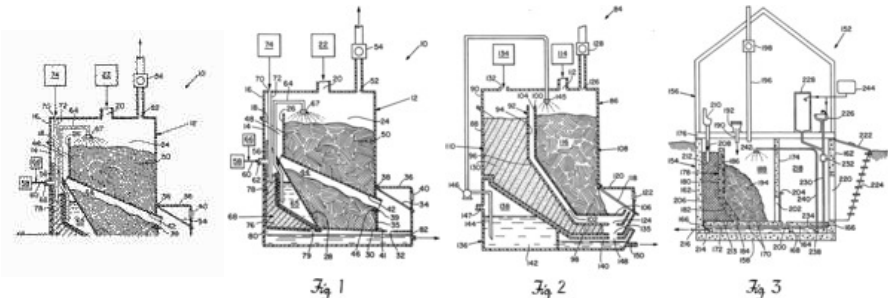
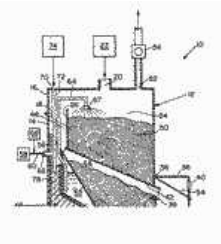
There is provided an integrated method of **composting** **compostable** organic waste matter by macerating **compostable** organic waste matter with a structuring agent and mixing additional **compostable** organic waste matter and/or structuring agent in the **composting** mixture. There is also provided an integrated method of biological valorization of **compostable** organic waste matter for **composting** by collecting in a coordinated manner a **compostable** organic waste matter from waste matter generator and delivering in a coordinated manner the collected **compostable** organic waste matter to a **composting** site.



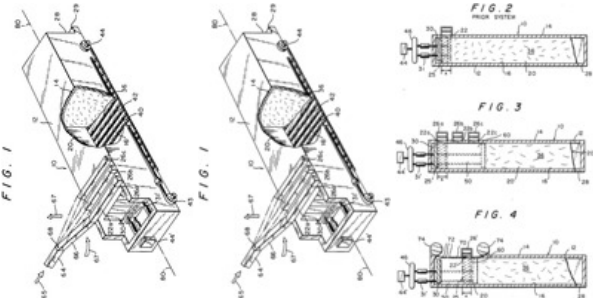
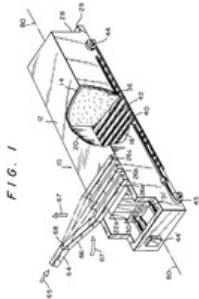
Methods, apparatus, and system for a **compost** system to reduce operator time, reduce power utilization, increase intensity of land use by the **compost** system, increase efficiency of biological activity in bulk material **composted** by the **compost** system, reduce odor production by the **compost** system, and to reuse water applied to and which may leach out of bulk material. The **compost** system may comprise an aerated pad, a pivot arm attached to a center of the aerated pad, and a control module. The aerated pad may receive a bulk material to be **composted** into a **compost** product. The aerated pad may comprise an air nozzle and a drain to direct water from the bulk material to a water collection system. The pivot arm may deposit the bulk material on the aerated pad. The control module may manage a temperature inside the bulk material using the air nozzle.



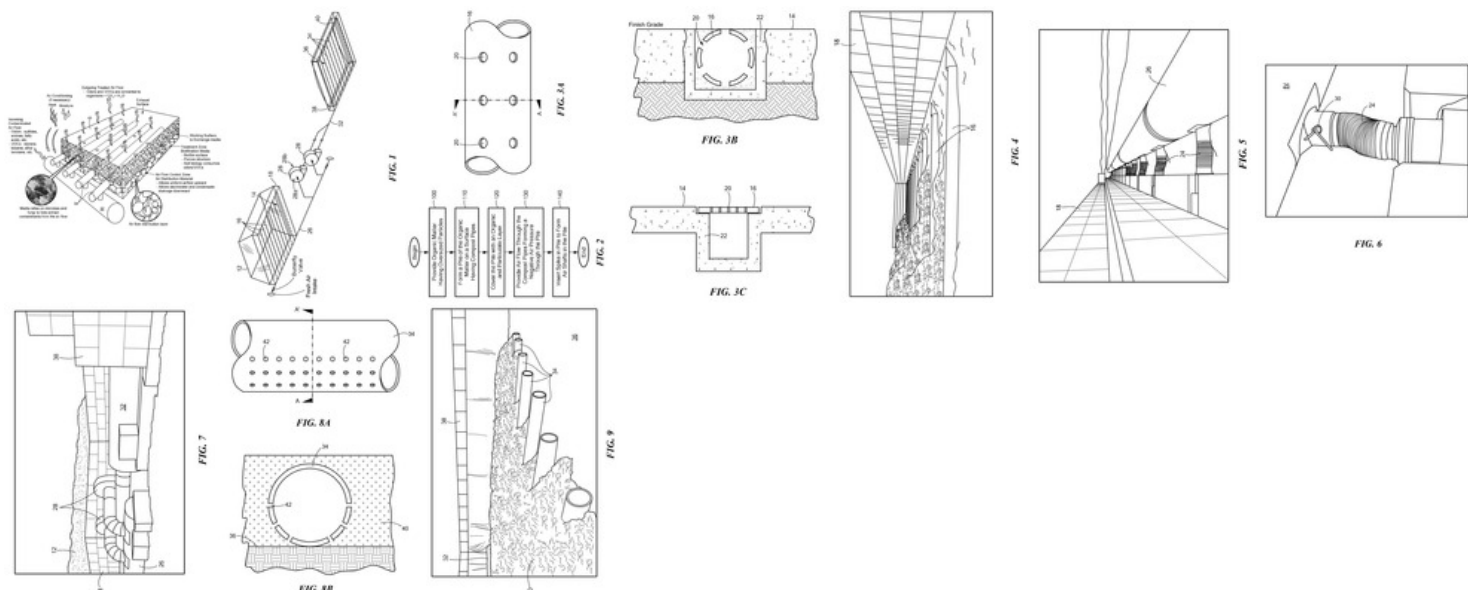
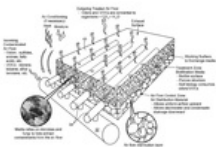
A system and method is disclosed for **composting** feces and treating. Human feces is collected within a **composting** retainer and exposed to sufficient air and water to allow the feces to **compost**, thereby forming **compost** product. Urine is collected within a urine treatment retainer which is at least partially partitioned from the **composting** retainer and wherein the urine is passed through a substrate supporting aerobic nitrifying bacteria, thereby nitrifying a significant portion of the ammonium ions in the urine to form liquid product. The **compost** product is suitable for subsequent use, such as fertilizer or for use in forming a mixture with soil to form topsoil.



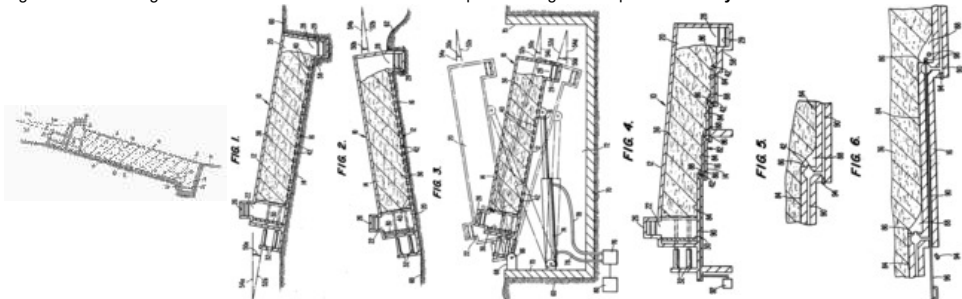
A method and apparatus is disclosed for **composting** of organic matter. A ram advances the entire mass of organic matter within the **composting** chamber to create an evacuated space in the **composting** chamber, which evacuated space is of substantially greater volume than the volume of an incremental inlet space. The incremental inlet space is a space in the **composting** chamber defined by a projection of an inlet opening into the **composting** chamber. After the creation of the evacuated space, a new charge of organic matter is fed through the inlet opening. The ram then moves this new charge of organic matter into the evacuated space in the chamber to join the existing mass of organic matter already in the chamber. The ram also lightly compresses the new charge to a predetermined **density** or porosity. Typically, the extent of compressive force applied to the new charge is less than that required to move the entire mass of organic matter through the chamber. In this way, the new charge remains sufficiently porous and uncompacted so as to facilitate drying with air which is circulated through the chamber. Once the new charge is sufficiently dry, the entire mass of organic matter may then be moved by the ram to create a new evacuated space in the chamber.



A method of unturned aerated static pile **composting** includes providing organic matter having oversized particles and forming a pile of the organic matter on a surface. The surface has a plurality of **compost** pipes. The method further includes covering at least a portion of the pile with an organic and particulate layer and then providing air flow through the **compost** pipes such that a negative air pressure is formed through the pile causing air and fluid to be withdrawn from the pile into the **compost** pipes. The method further includes inserting a spike in the pile at designated areas and times in order to form air shafts in the pile. The **composting** system includes a **compost** enclosure surrounding a plurality of **compost** pipes, each **compost** pipe having an air flow control valve, and at least one fan, each fan having an air intake and an air outlet. The air intake is in fluid communication with the plurality of **compost** pipes. The system also includes a bio filter system in fluid communication with the air outlet of the fan(s) and a spike configured for insertion into the **compost** pile in order to form air shafts in the **compost** pile.

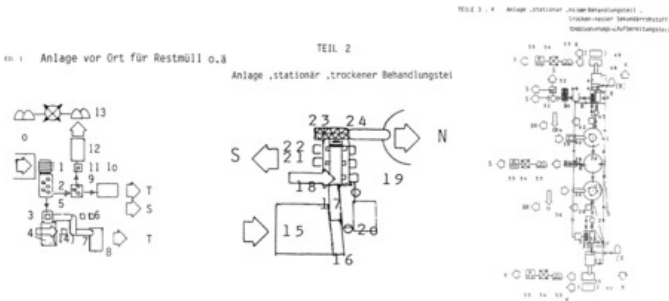
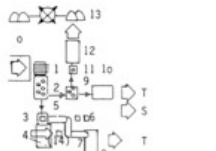


A **composting** method is disclosed for accelerated decomposition of organic matter (36). The organic matter is deposited into a chamber (20) of a vessel (12). A ram (30) moves through a relatively short stroke within one end of the vessel so that organic matter deposited in the vessel at one end may be moved through the chamber and discharged at the other end as a result of each successive charge of matter pushing the preceding charge forward through the vessel by the action of the ram. An optimum range of compaction **density** for the particular organic matter being processed is determined. Also, an angle of disposition for the vessel relative to the horizontal is established for the particular organic matter being processed. This angle of disposition is established so as to cause the amount of compressive force necessary to move the organic matter through the vessel to be such as to achieve the optimum range of compaction **density**.



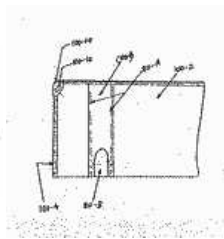
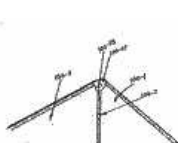
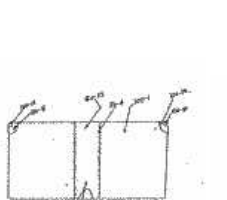
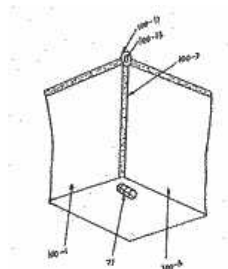
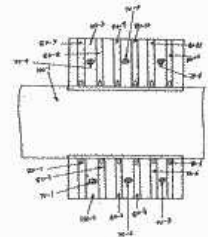
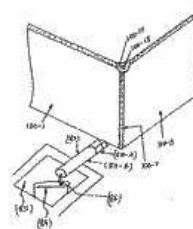
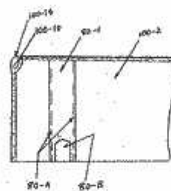
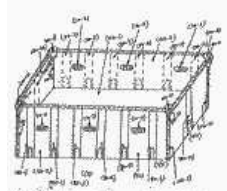
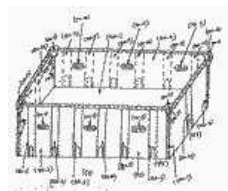
This novel multistage process recovers secondary materials from tailings, soiled plastic, tipped waste, household waste, **screen** rakings and grit from sewage works. A first plant section treats dried waste on site. At the point of delivery a mobile **screen** separates e.g. waste, **sieve** residues from **composting**, soiled plastic and tipped waste from bulk material larger than 150 mm through a drum **screen**. There is a controlled size reduction stage including a sack destructor. is used, or the closed. The **screening** separates a fine, mainly biogenous fraction smaller than 40mm/25mm grading size. The medium fraction 10/15mm to 25/40mm is transported in suitable road containers. Fine material from a second fine **sieving** is supplied to metal inductive **separation**, followed by intensive **composting**. In accordance with its quality, it may be used for agriculture after maturation. Coarse material undergoes magnetic **separation**, ferrous metal being containerised, together with any plastic sheet pulled out with it. During this process, further **screening** or air classification **separates** the sheets from the ferrous material. Residues from the coarse fraction are passed from a trough conveyor onto a mobile inspection and **sorting** table for visual inspection and **sorting**. Material is **separated** which can cause malodour or have a later effect on quality.

FIG. 1: Anlage vor Ort für Restmüll o.ä.



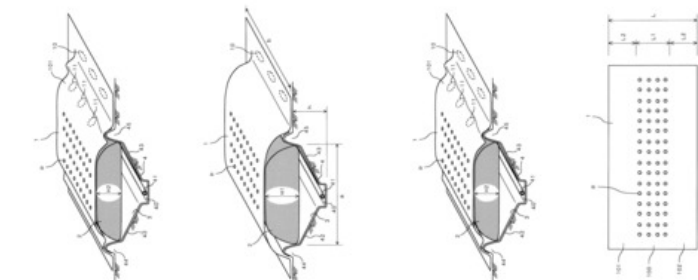
[illegible]

A perspective view of a rectangular frame assembly. The frame consists of four vertical legs and two horizontal rails at the top and bottom. Various components are labeled with numbers: 100 (top rail), 110 (bottom rail), 120 (left leg), 130 (right leg), 140 (corner bracket), 150 (corner bracket), 160 (corner bracket), 170 (corner bracket), 180 (corner bracket), 190 (corner bracket), 200 (corner bracket), 210 (corner bracket), 220 (corner bracket), 230 (corner bracket), 240 (corner bracket), 250 (corner bracket), 260 (corner bracket), 270 (corner bracket), 280 (corner bracket), 290 (corner bracket), 300 (corner bracket).

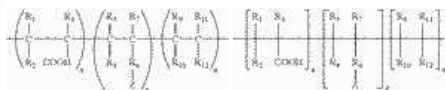
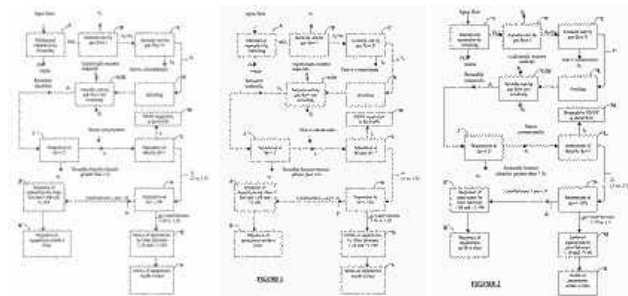
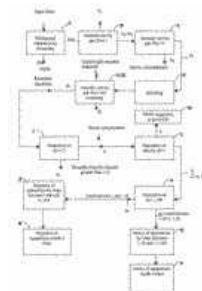


A process for converting **composted** organic matter produced by optimized **composting** procedures into enhanced organic fertilizer for agronomic and other uses. The raw organic matter is processed into **compost** by optimized standard methods. A wide variety of raw materials can be used in this invention. The finished **compost** is screened to remove all particles approximately 1 cm in size or greater. This coarse material is recycled back into the **composting** process. In the first step of this invention, the material below 1 cm is further **screened** to **separate** out the **compost** fine particles of 1 mm or less. A major proportion of the particles should be below 150 microns. The particles between 1 mm and 1 cm are rejected, and may be used for other purposes. In the next step, the **compost** fine material is mixed with suitable forms of plant nutrients, i.e. ammonium nitrate, to bring the plant available nutrients to a fertilizer grade level in the pellet. In the final step the **compost** fine material is pelleted at a pressure between 2,000 and 6,000 psi to form a fertilizer pellet of an appropriate **density** so that the nutrients will be released into a soil medium, or plant growth substrate, at a rate required for optimum plant growth. The compression process binds the chemical fertilizer into the pellet and assists in the timed release of the nutrients from the enhanced organic fertilizer pellet. The enhanced organic fertilizer pellets can be applied to farm fields, gardens, and the like, in the normal way.

PROBLEM TO BE SOLVED: To provide a novel coating material for **compost** capable of manufacturing a **compost** simply and at a low cost, and a simple **composting** facility.
SOLUTION: This coating material 1 for **compost** is used to coat a **compost** material 2 and a **compost**, and the coating material 1 for **compost** comprises a polyolefin resin film having a light **screening** rate of not higher than 50% and a plurality of pores p are formed in the film, or the coating material 1 for **compost** comprises a polyolefin resin film having a light **screening** rate of not higher than 50% and a plurality of pores p are formed in the central region of the film in the width direction but substantially no pore is formed in the both end regions 101 of the coating film in the width direction, and this simple **composting** facility is accommodated with the coating material 1 for **compost**.
COPYRIGHT: (C)2005,JPO&NCIPI



The invention relates to a method for selectively **separating** synthetic organic materials such as polymers and/or reinforced or non-reinforced copolymers in the form of wastes, in particular domestic wastes recyclable in order to be reused. Said synthetic organic materials are recuperated from broken used cars and obsolete consumer durable products. The inventive method for selective **separation** consists in **separating** materials which have an identical **density** threshold value and are selected from a dense medium comprising **separate** liquid fluid suspensions which consist of powdery disperses particles in an aqueous phase and are stabilised with respect to the **density** threshold value selected in such a way that a selective **separation** of a determined fraction of the mixture of separable used material is initiated.

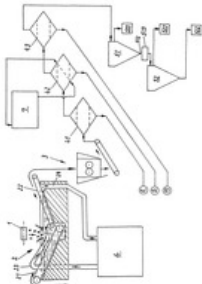


17.	Process and facility for treating and sorting recyclable waste materials	WO9731716	1997-02-26	F & P CLASSIFYING TECHNOLOGY F & P SORTIERTECHNIK F & P SORTIERTECHNIK* F & P SORTIERTECHNIK GMBH HARALD PILZ THOMAS FIEDLSCHUSTER	1997-09-04	1997-09-04
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The invention relates to a process and facility for treating and **sorting** recyclable waste materials which include a selection of heavy undesirable materials, with a shredding process for the residual raw waste, **separation** processes for **separating** recyclable materials from the shredded raw waste to produce a mixture of shredded plastic, and with **separation** processes for recovering **sorted** plastics. In order to reduce the number of process stages and energy consumption while improving **sorting**, the following process stages are proposed: a) soaking the isolated raw waste in a liquid in order to dissolve, partially dissolve, and release soluble components, b) selection of heavy undesirable materials in a horizontal liquid stream, based on the sinking rate (2), c) conveying of the moist crude waste from which the heavy undesirable materials have been released to the shredding device (3), d) shredding of the raw waste as it is simultaneously dried by the heat of crushing to produce shreds of less than 55 mm in size, e) **separation** of recyclable materials to produce a mixture of various plastics - in at least one process stage to **separate** the finest and lightest materials (42) such as fibres, silicon compounds and organic contaminants, and/or in at least one process stage for **separating** metals (41, 43), and f) **separation** of the mixture of various plastics using the float-sink process according based on the densities (51, 52) of the plastics.

11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.	101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200.
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11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.	101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200.
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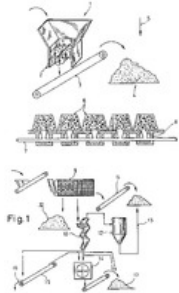
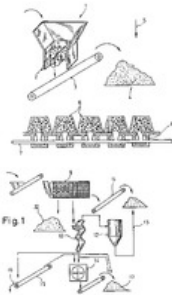


18.	Process for producing a compost material of high water absorbing and retaining capacity obtained especially from wood cutting industry wastes	WO9617809	1994-12-09	ALLIED COLLOIDS* MOHACSI FAROSTLEMEZGYAR RT* MOHACSI FAROSTLEMEZGYAR RT MOH TERRA VITA KFT*	1996-06-13	1996-06-13
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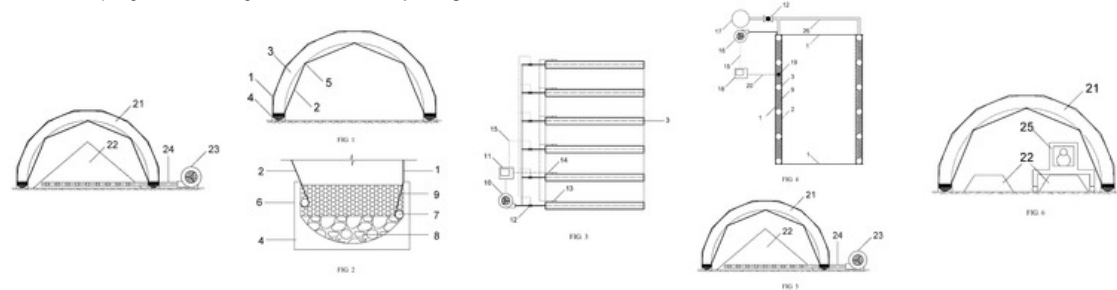
The subject of the invention is a process for producing **compost** of high water absorbing and retaining capacity, particularly by using **compost** material produced from wood industrial waste material which improves the soil fertility. During the process of the invention process the **compost** of wood industry origin transformed to plant absorbable manure and decomposed under aerobic conditions known per se to a water content of 30 to 35 %, **sieving** and putting the dehydrated product in prism while adding 1.5 to 3.0 % by weight water absorbing and retaining adjuvant is added to the **compost** during the prism formation process, turning over the prism several times by power machine, homogenising the mixture and covering with a black foil, its water content controlled and maintained at 30 to 35 % and, if desired, adjusting the water content within the above level. The process of the invention is used in agriculture.

19.	Method and apparatus for removing at least one fraction from a mixture of valuable substances	DE3836608	1988-01-22	BUEHLER BUEHLER UZWIL*	1989-07-27	1989-07-27
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Compost which is already matured is subjected to a **separating** operation immediately subsequent to a drum **screen**. The channel (10) carrying the flowing gas is connected to the outside of the drum **screen** (9) and is thus fed the undersized particles. In this arrangement, this channel (10) is constructed as a **separator** which **separates** a light fraction from a heavy fraction. In the path (22, 23) through which the heavy fraction passes, there is arranged at least one lock (24 or 25). <IMAGE>

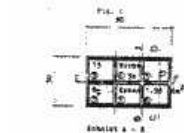
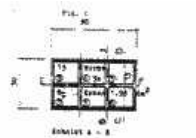


The present invention relates to a self-deodorizing **compost** treatment system. The system comprises: an outer membrane, an inner membrane, an inflatable supporting frame, and a deodorizing base. The invention is provided with two deodorizing bases. The outer membrane and the inner membrane are **separated** by the inflatable supporting frame. The two ends of the outer membrane and the two ends of the inner membrane are fixed on the two deodorizing bases, forming a sealed space between the outer membrane and the inner membrane. A **compost** pile is placed in the area defined by the inner side of the inner membrane. A malodorous gas and water vapor generated by the **compost** pile enters, via the inner membrane, the sealed space formed by the outer membrane and the inner membrane. The water vapor forms condensate water in the sealed space. A molecule of the malodorous gas is absorbed and dissolved in the condensate water to generate wastewater. The wastewater flows along the inner side of the outer membrane and the outer side of the inner membrane to the deodorizing base located at the bottom. The wastewater is then discharged through the deodorizing base. When compared to the prior art, the system provided in the invention has a simple structure and can be disassembled. The system can isolate and remove an unpleasant odor and water vapor generated during waste biomass **composting**.



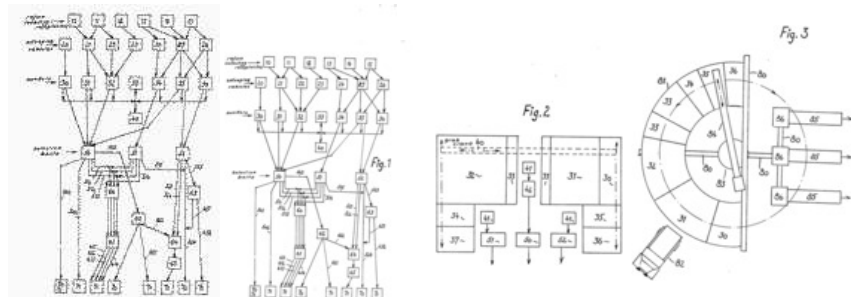
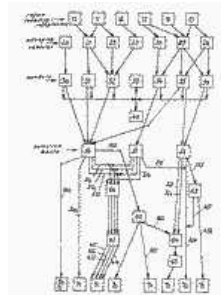
21.
- Building, in particular **sorting**, processing and dispatch building, for recycling refuse, delivered in a pre-**sorted** or other manner, from private households and industrial establishments
- DE3546431
- 1985-07-19
- MEYER GERHARD;MEYER, GERHARD, 2850 BREMERHAVEN, DE
- 1987-01-29
- 1987-01-29

For the purposes of standardisation, simplification and improvement in the waste-disposal sector, the invention specifies a **sorting**, processing and dispatch building which receives all refuse produced in a catchment area of approximately 15,000 inhabitants and, in 8 working areas, ensures an optimum division of all refuse items produced, in order to obtain the highest possible degree of utilization. For all the humus-containing refuse, there is built onto the **sorting**, processing and dispatch building a special **compost** reactor in which, given continuous raw-material supply and continuous ready-made-**compost** discharge, fermentation gas and hot water are additionally produced in a uniform manner. In order to simplify the **sorting**, processing and dispatch operations, universal rolling containers and universal pallets are used, the universal pallet, in its compact form, receiving all conceivable usage containers of all shapes and sizes and, as a stable and standard transporting container, being capable of replacing other, additional packaging means.



22.
- Method of and device for treating heterogeneous waste
- SE7807432
- 1977-07-07
- FA MATTHIAS TRIENEKENS 4060 VIERSEN TRIENEKENS FA MATTHIAS TRIENEKENS MATTHIAS*
- 1979-01-08
- 1979-01-08

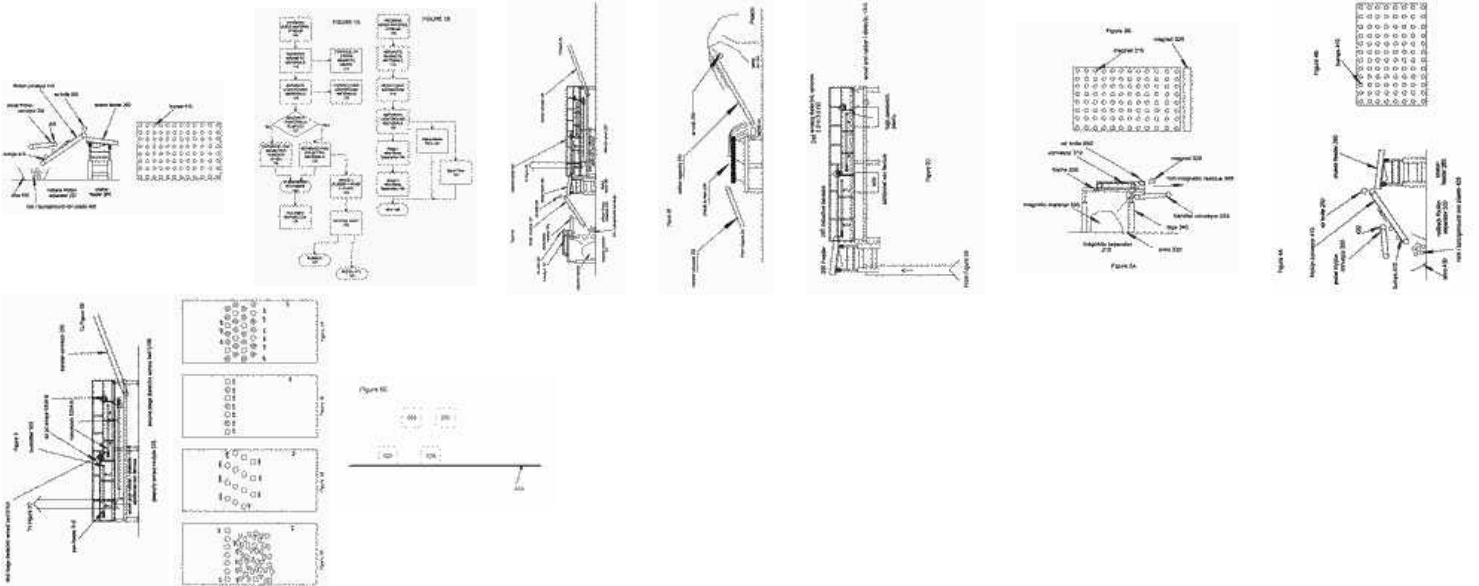
A method for treating heterogeneous waste, particularly household garbage and general industrial refuse, e.g. paper, glass or bulk objects such as furniture. The composition of waste supplied to the treating site depends on its source, i.e. household bin or industrial skip, and waste from different sources is supplied through different channels, i.e. by different salvage vehicles. At the site the waste is **sorted** and treated to obtain selected products e.g. for re-cycling. To facilitate obtaining the products and to cope with the range of waste supplied to the site, a number of **separate** bunkers are provided, each for waste from a particular source. The bunkers are arranged in an arc, although they could be in block formation and are accessible to salvage vehicles. The jib or boom of a crane or another mechanical device can sweep over the bunkers and transfer selected waste to one of a number of manual **sorting** or distributing belts, preferably three, via optional hoppers. The waste is manually **sorted** into streams of different waste types which are subsequently broken, **separated** and graded to give specific products. Streams of like waste from different **sorting** belts are combined.



23.
- Method for **sorting**, collecting and **composting** wet garbage and using method for obtained organic fertilizer
- CN104889138
- 2015-05-22
- SHANGHAI HONGRUI CHEMICAL PRODUCT*
- 2015-09-09
- 2015-09-09

The invention discloses a method for **sorting**, collecting and **composting** wet garbage. The method comprises the following steps: step I, **sorting** and collecting household garbage: **sorting** the household garbage, filling a wet garbage part into a completely biodegradable garbage bag, and intensively collecting the wet garbage according to time points; step II, transferring the wet garbage which is collected in the step I to a **composting** point; and step III, carrying out aerobic **composting** on the wet garbage at the **composting** point to obtain an organic fertilizer. According to the method for **sorting**, collecting and **composting** wet garbage disclosed by the invention, reduction treatment, harmless treatment and resource treatment of the household wet garbage can be realized; and the method has the characteristics of being free of odor, wastewater and germs, saving labor power, being convenient to supervise and the like in an integral wet garbage treatment process.

An automated system for **sorting** dissimilar materials, and in particular for **sorting** plastics from other materials and for **sorting** different types of plastics from one another comprises, depending upon the embodiment, combinations of a sizing mechanism, a friction **separator**, an air **separator**, a magnetic **separator**, a dielectric sensor **sortation** bed, shaker **screening**, a ballistic **separator**, an inductive sensor **sortation** system and a float/sink tank. The dielectric sensor **sortation** system may be either analog or digital, depending upon the particular implementation. One or more float/sink tanks can be used, depending upon the embodiment, each with a media of a different specific gravity. The media may be water, or water plus a compound such as calcium chloride. In addition, multiples of the same general type of module can be used for particular configurations. A heavy media system or a sand float process can be used either alternatively or additionally.



A method of **separating** waste material to a plurality of **separated** materials is disclosed herein. The method is effected by subjecting the waste material to a **separation** according to specific gravity, to thereby obtain two or more fractions, and optionally subjecting one or more of said fractions to additional **separation** procedures, to thereby obtain two or more of a low-**density** polymeric material, a high-**density** polymeric material, a metal, a glass, an oil, and lignocelluloses. The disclosed method can further be effected by processing one or more of the **separated** materials to thereby obtain one or more processed materials of a beneficial use. Further disclosed herein are **separated** and/or processed materials obtainable by the method, articles-of-manufacturing comprising same, and systems for **separating** and/or processing the waste material.

