(54) Title: AN ARCHITECTURAL STRUCTURE AND METHOD THEREOF

(57) Abstract: An architectural structure comprises a core column structure (1), a plurality of recessed platform structures (2) vertically spaced apart from each other and supported by the column structure, and landfill filled in the recessed platform structures to form plots. A water reticulation system moves through all the plots from a central water supply system. Dwellings (4) are built on the plots.
AMENDED CLAIMS
received by the International Bureau on 13 July 2009 (13.07.09)
original claims 1, 19-21, 33, 38 and 34-47 are amended, remaining claims unchanged.

1. An architectural structure comprising,

- at least one core column structure;

- a plurality of recessed platform structures extending operatively orthogonally from said column structure and supported thereby, said platform structures spaced apart vertically from each other so that each of the platforms is adapted to receive adequate sunlight and ventilation independently and an unobstructed scenic view;

- landfill filled in said recesses of the recessed platforms to form plots;

- water reticulation systems provided in at least some of said platforms connected with each other and to a central water supply system, said water reticulation system including treatment plants for treatment of water after use at each plot and providing the treated water to a plot at an operatively level;

- access means connecting the plots with the ground level and with other plots; and

- amenities/ utilities provided to at least some of said plots.

2. An architectural structure as claimed in claim (1) wherein, no platforms are provided to the column structure at least up to a height of around 10 meters to around 30 meters.
3. An architectural structure as claimed in claim (1) wherein, each of the plots is provided with fencing around the edge of the platform.

4. An architectural structure as claimed in claim (1) wherein, each of the platforms is provided with a protective fencing and a security fencing at two levels extending from the outer edge of the platform to prevent any object from falling down.

5. An architectural structure as claimed in claim (1) wherein, the size of the platforms reduces as the level increases.

6. An architectural structure as claimed in claim (1) wherein, said column structure includes support columns and beams and trusses.

7. An architectural structure as claimed in claim (1) wherein, the core column structure is hollow.

8. An architectural structure as claimed in claim (1) wherein, the core column structure is solid and includes support columns which are hollow.

9. An architectural structure as claimed in claim (1) wherein, said column structure encloses the access means.

10. An architectural structure as claimed in claim (1) wherein, said column structure provides conduits for the water supply system, amenities and utilities.

11. An architectural structure as claimed in claim (1) wherein, said recessed platforms are provided around the core column in the form of a petal formation.

12. An architectural structure as claimed in claim (1) wherein, at least some of the recessed platforms are at the same level or plane.

13. An architectural structure as claimed in claim (1) wherein, all said recessed platforms are at different elevated levels.

14. An architectural structure as claimed in claim (1) wherein, said landfill includes an aggregate of stones, gravel, soil and clav.
5. An architectural structure as claimed in claim (1), wherein, said landfill material is graded into top soil, sub soil and earth containing stones, gravel, soil and clay.

6. An architectural structure as claimed in claim (1) wherein, said landfill includes segments of landfill made by compacting stones, gravel, soil and clay together off site and transported to site for filling the recesses.

17. An architectural structure as claimed in claim (1) wherein, said landfill includes sections of land dug out from the ground and placed in the recesses which eventually get diffused into one other and form an integrated landfill.

8. An architectural structure as claimed in claim (1) wherein, said water reticulation system includes independent water connection to each of the said plots.

19. An architectural structure as claimed in claim (1) wherein, the water reticulation system includes means to collect water percolated through at least some of the plots and supply the collected water to a plot at a lower level.

20. An architectural structure as claimed in claim (1) wherein, the water reticulation system includes a perforated plate provided spaced apart from the base of the recess in said platform, forming a space between said plate and the recess for collection of the water percolated through the landfill.

21. An architectural structure as claimed in claim (1) wherein, the water reticulation system includes holding tanks at least at some of the plots for holding treated water.

22. An architectural structure as claimed in claim (1) wherein, the water reticulation system includes pumping means to pump water collected at the lowermost plot up to the top of the structure for reuse; optionally alter a final treatment.
23. An architectural structure as claimed in claim (1) wherein, the water reticulation system includes means to monitor the quality of the water to be supplied and means to divert water for further treatment if not found satisfactory for use.

24. An architectural structure as claimed in claim (1) wherein, the water reticulation system includes a solid waste management which includes a compost pit located at ground level to receive waste from the treatment plants in the system.

25. An architectural structure as claimed in claim (1) which includes a security fencing provided around the plot adapted to collect rain water and supply the collected rain water to the water reticulation system.

26. An architectural structure as claimed in claim (1) wherein, said access means includes staircases, escalators, roadways, ramps, and lifts.

27. An architectural structure as claimed in claim (1) wherein, at least one housing structure is constructed on some of the said plots; said housing structure selected from a group of housing structures consisting of a dwelling, a bungalow, a club, an educational structure, a shop, a parking lot, a recreational facility, a gym, a playing ground, a power plant, a wind mill, and a library.

28. An architectural structure as claimed in claim (1) wherein, the said central or support column forms part of the housing structure built around it.

29. An architectural structure as claimed in claim (1) wherein, said housing structures on different plots do not share a common floor or roof.

30. An architectural structure as claimed in claim (1) wherein, at least some of said plots are adapted for use for agricultural, horticultural, landscaped garden, park, vehicular parking, helicopter landing, recreational, and/or sporting.
31. An architectural structure as claimed in claim (1) wherein, at least some of said plots are adapted for use in agricultural, horticultural, landscaped garden, park, recreational, and sporting use and the water reticulation system includes a drip irrigation system passing through the landfill in the plots.

32. An architectural structure as claimed in claim (1) wherein, some area of the said plots are provided with means, such as awnings for protection from rain.

33. A method for creating an architectural structure, said method comprising the following steps:

   constructing at least one column structure;

   constructing plurality of recessed platform structures extending in an operative horizontal position; from said column structure and supported thereby, said platform structures being spaced apart vertically from each other so that each of the platform is adapted to receive adequate sunlight and ventilation independently and an unobstructed scenic view;

   filling the recesses in said recessed platforms with a soil bed to form plots, wherein said soil is an aggregate of soil, clay, gravel and stones;

   constructing housing structures on at least, some of said plots;

   providing a water reticulation system for at least some of said plots connecting water reticulation system in said plots to each other and to a central water supply system;
recycling water after treatment and separation of solid waste from plot to plot and using the recycled water from a plot at a higher level, at a plot at a relatively lower level.

providing means to access said plots from the ground level and from other plots; and

providing amenities/utilities to at least some of said plots.

34. A method for creating an architectural structure as claimed in claim (33) wherein the method includes constructing each of the elevated plots at different level in the form of petals.

35. A method for creating an architectural structure as claimed in claim (33) wherein said method includes providing support structures, such as beams, trusses and support columns for supporting the plots.

36. A method for creating an architectural structure as claimed in claim (33) wherein said method includes creating a gap at the base of each platform for collecting water percolated through the land fill in the platform and connecting the gap to the water reticulation system.

37. A method for creating an architectural structure as claimed in claim (33) wherein said soil bed is prepared in the recess by filling the recess with soil, clay, gravel and stones in a graded manner.

38. A method for creating an architectural structure as claimed in claim (33) which includes the step of constructing plots starting from a height of around 10 meters to around 30 meters for free movements of people, vehicles and for other public uses as vehicle parking, parks below the architectural structure.
39. A method for creating an architectural structure as claimed in claim (33) wherein the method includes constructing said housing structures or spaces on said plots such that, no two structures or spaces on different plots share a common roof or floor.

40. A method for creating an architectural structure as claimed in claim (33) wherein the method includes constructing said housing structures on said plots by incorporating the columns within the housing structure.

41. A method for creating an architectural structure as claimed in claim (33) wherein the method includes constructing a dwelling space surrounded by a landscaped garden on said plot.

42. A method for creating an architectural structure as claimed in claim (33) wherein the method includes providing means to protect said housing structures from direct sunlight and unwanted heat and from rain and inclement weather.

43. A method for creating, an architectural structure as claimed in claim (33) wherein said method includes providing solar panels mounted on the plots, and around the plots for generating electricity; generating electricity therefrom and using said, electricity in the housing structures on said plots and for the water reticulation system.

44. A method for creating an architectural structure as claimed in claim (33) wherein the method includes generating electricity by means of a windmill on the any of the plots and preferably on the topmost plot.

45. A method for creating elevated plots as claimed in claim (33) wherein the method includes providing means for harvesting of rain water and storing said rainwater in holding tanks for later use.

46. A method for creating an architectural structure as claimed in claim (33) wherein the method includes providing means for treatment of used water and recycling of the treated used water.
47. A method for creating an architectural structure as claimed in claim (33) wherein series of such structures are connected by roadways, lanes at a height of 30 meters, and again at a height of 60 meters and so on, creating "Sky-villages".