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(54) Title: A MODULAR LIVING SPACE

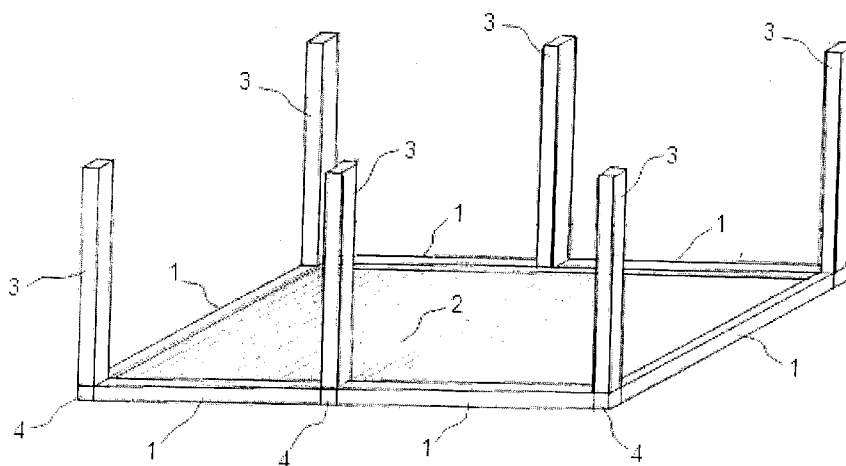


Figure 1

(57) Abstract: The invention relates to a modular living space used in natural disasters, or as structures used for various purposes in construction site facilities, wards, apart-hotels, shower cabins, buffets, security containers in building complexes, etc.; wherein it comprises corner locking wood (4) having connection protrusions (4.1) and profiles (1, 3) having profile holes (1.1, 3.1) and profile channels (1.2, 3.2).

## DESCRIPTION

### A MODULAR LIVING SPACE

#### 5 TECHNICAL FIELD

The invention relates to living spaces which can provide service for people whose houses are damaged due to various causes (earthquakes, floods, etc.).

10 The invention, in particular, relates to a modular living space which is practical to mount and dismount thanks to the mount/dismount system thereof, which can be taken to the place where it will be used in dismounted form and installed, thereby reducing cost of conveyance, at the same time offering solutions for any vital need.

#### 15 STATE OF THE ART

Today, aid tents or prefabricated house constructions are used for providing a new living space for people after a natural disaster.

20 The aid tents put up cannot sufficiently meet the needs of the people, and they are quite affected by unfavorable weather conditions and environmental factors. In fact, they may lead to such events as fire, in addition to being affected by unfavorable weather conditions, which, in turn, causes loss of lives. Moreover, no usage areas such as kitchens, bathrooms, etc. are provided in the tents.

25 Prefabricated houses used as another solution are resistant to unfavorable weather conditions and environmental factors. However, since it requires quite a long time to install prefabricated houses and to make them ready for use, they are not able to meet urgent need. Furthermore, transportation of  
30 prefabricated houses cost much.

Therefore, new configurations that will eliminate the above mentioned disadvantages and offer solutions for the existing systems are needed.

### **PURPOSE OF THE INVENTION**

5 The present invention relates to a modular living space that meets the above mentioned needs, eliminates all of the disadvantages and provides some other advantages.

10 The purpose of the invention is to introduce a living space which is not affected by environmental factors and unfavorable weather conditions.

Another purpose of the invention is to introduce a living space that offers solutions for all needs.

15 Another purpose of the invention is to provide a configuration that is easy and practical to install in case of need.

20 Another purpose of the invention is to reduce transportation and other costs by providing a configuration that can be carried and stored in demounted form.

25 In order to achieve all of the advantages that are mentioned above and will be further understood from the detailed description below, the present invention introduces a living space comprising a corner locking wood having connection protrusions that provide the modular structure, and profiles having profile holes and profile channels.

30 In a preferred embodiment of the invention, the base, walls, and ceiling of said living space are configured by flooring connected to profile channels.

In a preferred embodiment of the invention, slide floor that is connected to profile channels and that functions as door is used in said living space.

5 In another preferred embodiment of the invention, corner locking wood may comprise connection protrusions or connection recesses so as to provide the modular structure.

10 In another preferred embodiment of the invention, the profiles may comprise connection recesses or connection protrusions so as to provide the modular structure.

15 In the preferred embodiment of the invention, a configuration that is resistant to weather conditions and is not affected by sudden temperature changes is achieved, wherein floors and wooden-like composite profiles made of polymer and wood powder are used as production material.

The structural and characteristic aspects and all the advantages of the present invention will be more clearly understood by means of following figures and the detailed description written with references to these figures.  
20 Therefore, while making an evaluation, these figures and the detailed description should be taken into account.

### **BRIEF DESCRIPTION OF FIGURES**

25 In order for the embodiment of present invention and the advantages thereof, together with the additional elements, to be best understood, it should be evaluated together with the below described figures.

Figure 1 is the view of the modular living space according to the invention in installation stage.

30 Figure 2 is the cross-sectional view of the components of the modular living space according to the invention.

Figure 3 is the view of the modular living space according to the invention in installation stage.

Figure 4 is the view of the modular living space according to the invention subsequent to installation.

5

## REFERENCE NUMERALS

1. Horizontal profiles
  - 1.1. Profile holes
  - 1.2. Profile channels
- 10 2. Base floor
3. Vertical profiles
  - 3.1. Profile holes
  - 3.2. Profile channels
4. Corner locking wood
- 15 4.1. Connection protrusions
5. Wall floor
6. Ceiling floor
7. Slide floor
8. Modular living space

20

## DETAILED DESCRIPTION OF THE INVENTION

In this detailed description, the preferred embodiments of the modular living space (8) according to the present invention will be explained in order for the subject to be better understood, without any limitations.

25

In Figure 1, first part of the installation stage of the modular living space (8) is given. Modular living space (8) can be installed on a floor such as lean concrete, etc. During installation stage, horizontal profiles (1), the sizes of which are preferably, 15x15x300 cm, are arranged on the ground first such  
30 that one side thereof will remain open and then they are fixed by means of corner locking wood (4). After fixation, base floor (2) is placed such that it will

be inserted in profile channels (1.2). After placing the base floor (2), the side remaining open is covered with horizontal profile (1). Insulation can be achieved by putting styrofoam between the base floor (2) and the ground.

- 5 After forming the base of the modular living space (8), six vertical profiles (3), the sizes of which are preferably 15x15x250 cm, are mounted by being connected with corner locking woods (4).

10 In Figure 2, cross-sections of corner locking wood (4), profiles (1, 3) and floors (2, 5, 6) are given. Corner locking wood (4) and profiles (1, 3) are interconnected when connection protrusions (4.1) fits in profile holes (1.1, 3.1). Clutch is provided when the floors (2, 5, 6) composing the base, walls and ceiling fit in profile channels (1.2, 3.2).

- 15 As seen in Figure 3, after mounting the vertical profiles (3), wall floors (5) are located. After placing wall floors (5), the upper part thereof is connected by means of horizontal profiles (1) and corner connection woods (4) such that the side where the door is to be placed will be excluded. The connection of wall floors (5) with profiles (1, 3) is provided upon fitting of the floor (5) to  
20 profile channels (1.2, 3.2).

In the last stage of the installation as seen in Figure 4, ceiling floors (6) are mounted with the same technique. After mounting ceiling floors (6), slide floors (7) to serve as doors are engaged through the side where the  
25 horizontal profile (1) is not affixed. After fixing slide floors (7), the structure is completely installed upon mounting the last horizontal profile (1) remaining open.

30 The isolation of modular living space (8) can be achieved by spraying liquid membrane. Electrical and sanitary installation is antigran, which is prepared in package form and mounted.

According to need, such areas as kitchens, bathrooms, lavatories, etc. can be provided in modular living space (8). It may optionally be designed in a larger size and a terrace can be provided. A quality living space is provided thanks to such areas formed therein.

5

Moreover, the modular living space (8) is not limited to providing a sheltering place for disaster victims; it can also be used for various structures in construction site facilities, wards, apart-hotels, shower cabins, buffets, security containers in building complexes, etc.

10

In no stage of the installation of the modular living space (8), are connectors like screws, nails, bolts, etc. used; on the contrary, it is only installed by mounting and dismounting in modular manner.

15 The modular living space (8) can easily be mounted and dismounted thanks to the modular structure thereof. In this way, it becomes possible to store and transport in dismounted form. Storing and transporting it in dismounted form provides advantages in terms of cost.

20 Floors (2, 5, 6) and wooden-like composite profiles (1,3) made of polymer and wood powder are chosen as production materials of the modular living space (8). Thus, a configuration that is resistant to weather conditions and is not affected by sudden temperature changes is achieved. The material used is resistant to water and moisture and does not require such operations as  
25 dying, coating, etc. Furthermore, it is a recyclable material as a value-added product since it is manufactured using the wastes of wood industry.

As an alternative embodiment, the connection of the modular living space (8) can be achieved by using connection holes on corner locking woods (4) and  
30 connection protrusions on profiles (1, 3).

**CLAIMS**

1. A modular living space used in natural disasters, or as structures used for various purposes in construction site facilities, wards, apart-hotels, shower  
5 cabins, buffets, security containers in building complexes, etc.; characterized in that; it comprises corner locking wood (4) having connection protrusions (4.1) and profiles (1, 3) having profile holes (1.1, 3.1) and profile channels (1.2, 3.2).
- 10 2. A living space according to Claim 1; characterized in that; it comprises floors (2, 5, 6) connected to the profile channels (1.1, 3.1) and serving as the base, wall, and ceiling in said living space.
- 15 3. A living space according to Claim 1; characterized in that; it comprises slide floor (7) connected to the profile channels (1.1, 3.1) and serving as door in said living space.
4. A living space according to Claim 1; characterized in that; it comprises corner locking wood (4) having connection protrusions or connection  
20 recesses so as to provide the modular structure.
5. A living space according to Claim 1; characterized in that; it comprises profiles (1, 3) having connection recesses or connection protrusions so as to provide the modular structure.  
25
6. A modular living space according to any one of the preceding Claims; characterized in that; it comprises wooden-like composite material made of polymer and wood powder as the production material of said modular living  
30 space (8).

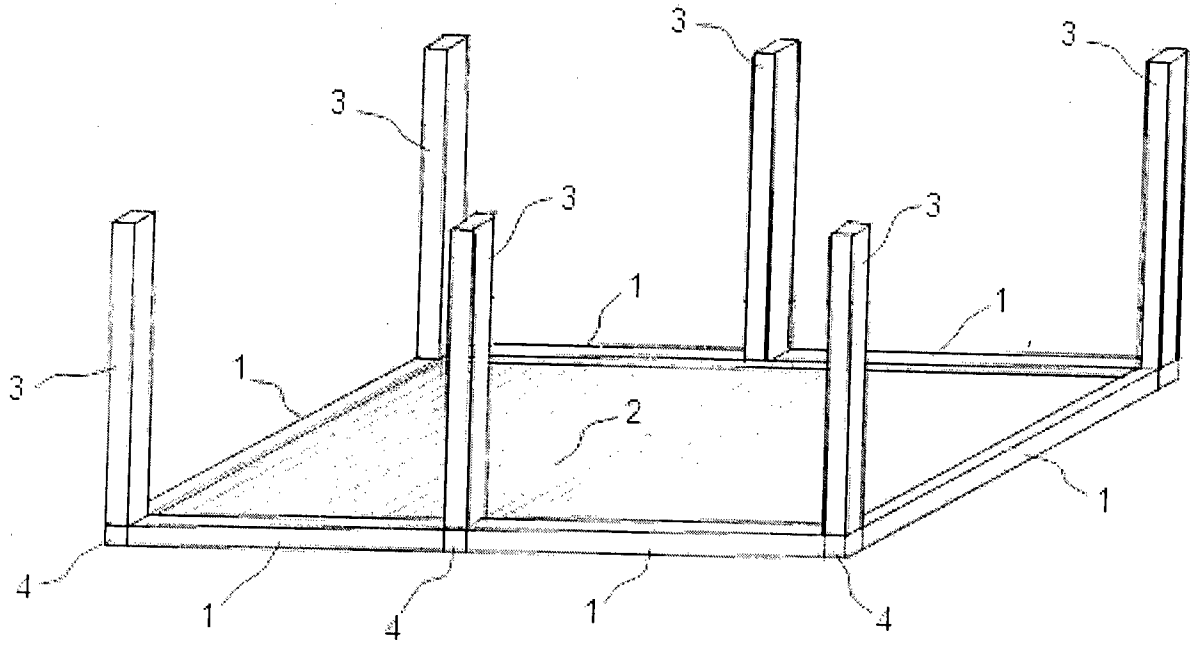


Figure 1

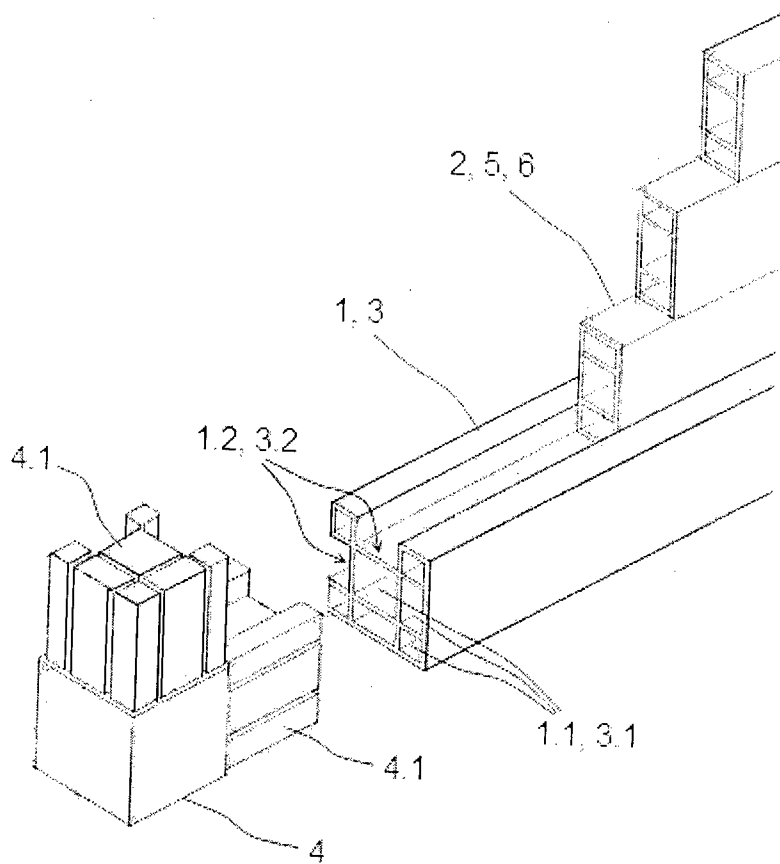


Figure 2

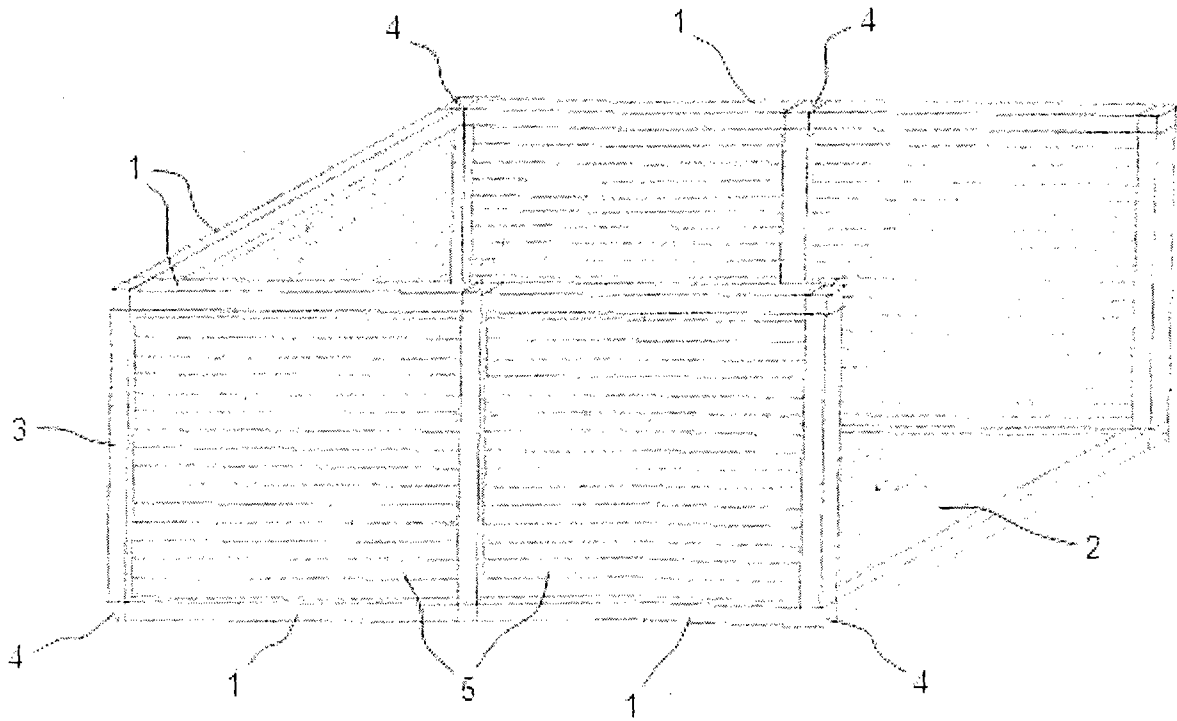


Figure 3

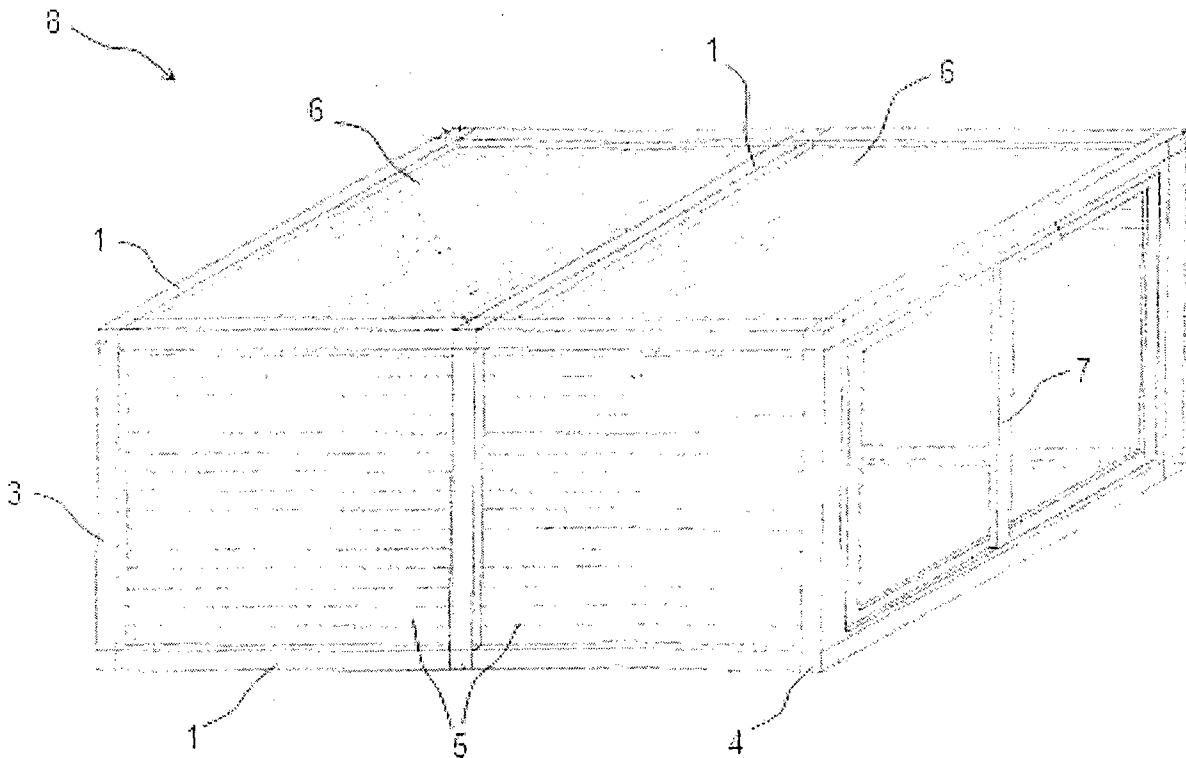


Figure 4