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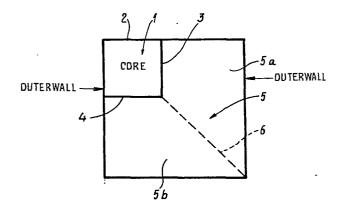
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64 Building comprising one or more united living units.

Building comprising one or more united living units, in which each unit comprises, as viewed in ground plane, a rectangular core (1) which is substantially completely enclosed by walls, of which core one side (2) is completely positioned in a facade of the living unit, and a space (5) enclosing two other adjoining sides (3, 4) of said core as far as said two sides are positioned inside said living unit. Said space is furthermore bounded by a wall belonging to the above mentioned facade and by a wall disposed in the opposed facade, in said space the entrance to said living unit being situated. Furthermore said space can be divided into two substantially equally shaped sections (5a, 5b) by means of an imaginary line (6) which forms the extension of the inwardly diagonal line of said core.



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Building comprising one or more united living units.

The invention relates to a building comprising one or more united living units.

The invention relates in particular to a building comprising united living units arranged in a number of floors disposed on top 5 of each other.

Upto now for each living unit in a building of this type, the living room and rooms with other functions, such as the kitchen and bed rooms are designed as distinct mutually different rooms, so that it is not simply possible to interchange room functions. It is there10 fore necessary to design and construct a different ground plan for said living units for each situation of the building, taking especially the north direction into account, so that especially the living room, which is always bounded by a facade wall is situated in the most favourable position in relation to said north direction and/or in relation to the gallery in the case of living units, which are accessable through a gallery, which necessity increases the building costs.

An object of the invention is now to realize a building of the above mentioned type with such a ground plan for each living unit,

20 that it is simply possible to interchange the functions of living room and rooms with other functions, so that for each situation the living room can have the most favourably position.

Said object is achieved according to the invention in that each living unit comprises, viewed in ground plan, a core, which is substantially completely enclosed by walls and can be circumscribed by a rectangle of which one side is completely positioned in a facade of the living unit and of which the opposed side together with one of the adjoining sides are at least for the most part positioned inside said living unit, which living unit furthermore comprises a space enclosing said core as far as said last mentioned two sides of said core are positioned inside said living unit, which space is bounded by a wall disposed in said facade and by a wall disposed in the opposed facade, in which space the entrance to said living unit is situated and which space furthermore is divided into two substantially equally shaped sections by means of an imaginary line forming the ex-

tenstion of the inwardly directed diagonal line of said rectangle.

In this way it is simply possible to interchange the functions of the rooms divided by the imaginary line without deteriorating the effectiveness of the living functions of the core.

Three living units each having a ground plan according to the invention, can be united such that they include a right corner, said imaginary lines of said three living units meet at the angular point of said corner and the entrances to said living units being positioned near said angular point, because notwithstanding the fact that the 10 facades have orientations which differ over 90°, the living rooms of all said living units can be bounded by the most favourable facade without the necessity to change the ground plan.

In this way it is possible to discard the usual monotoneous way of building, in which generally rectangular blocks of living units 15 are situated with intermediate spaces one behind the other, because the living units according to the invention can be interconnected into a angular pattern so that for instance meandering building patterns can be realized.

A very advantageous building pattern is realized when the units 20 are combined into a annular configuration surrounding a rectangular space, in each of the corners of said ring configuration three units including a right corner and a number of said units enclosing said rectangular space being positioned on top of each other.

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In this way is is possible to built a great number of living 25 units per ground surface unity, whereas per living unit less access routes are necessary than usual. The area within the rectangular annular configuration forms as it were a sheltered inner court which forms a transition between the public outer area and the living units, which inner court can be used as play ground and/or garden 30 area.

Seen from a constructive point of view it is possible in a very simple and rather cheap way to place the lower most ring of units on the overall space bounded by said rectangular annular configuration, which space offers sufficient parking places for the cars of all the 35 inmates, so that cars can completely disappear from the living area.

The invention will herinafter be explained in more detail referring to the attached drawings.

Fig. 1 illustrates schematically a ground plan of a living unit according to the invention.

Fig. 2 illustrates a ground plan of a number of interconnected living units united into a rectangular annular configuration.

Fig. 3 shows on a larger scale an corner section of the ground plan of Fig. 2.

Fig. 4 shows a corner section positioned on top of the corner section in Fig. 3.

As is shown in Fig. 1 the living unit according to the invention 10 has, viewed in ground plan a core 1 which can be circumscribed by a reactangle, of which for instance the side 2 extends in a facade and the sides 3 and 4 are positioned inside the living unit, and a space 5 partly surrounding the core 1, which space 5 is divided by the imaginary line 6 into two substantially equally shaped space sections 15 5a and 5b by the imaginary line 6. The functions of the space sections 5a and 5b can be simply interchanged without influencing the function of the core 1. In this way it is possible, depending on the most favourable facade in relation to the north direction, to create the living room in section 5a or in section 5b and for instance the 20 diningroom/kitchen in section 5b or section 5a respectively.

The sides 3 and 4 of the rectangle defining the core need not to be positioned completely within the living unit as is illustrated in fig. 1, but can also be positioned for the most part within the unit in the way illustrated in Fig. 2.

In Fig. 2 a number of living units 11, 12, 13; 21, 22, 23; 31, 32, 33; 41, 42, 43 are combined into a annular configuration surrounding a rectangular space, whereby the units 11, 12, 13 and 21, 22, 23 and 31, 32, 33 and 41, 42, 43 respectively defining a right corner so that the imaginary lines 6 of each of those three living units (see also Fig. 1) are meeting in the angular point of said corner. The entrances of each of those three living units are positioned near this angular point as is clearly illustrated in Fig. 3, and these entrances are giving access to up/down passage ways such as a staircase 7.

Furthermore in Fig. 2 intermediate spaces 8 are shown which can be used for enlargening the adjoining living units.

A number of such living units combined into a rectangular annul-

ar shaped configuration can be placed on top of each other.

Fig. 3 illustrates on a larger scale an embodiment of the upper left hand section in Fig. 2. In this ground plan the letter E indicates the entrance, Wo indicates the living room, K-E indicates the kitchen/diningroom, S indicates a number of bed rooms, B indicates the bath room, W indicates the toilet, V indicates a room for the central heating system, O indicates a store room and T indicates a terrace. It appears clearly from this figure that in each living unit the living room and the kitchen/dining room can be simply interchanged so that it is always possible to have the living room adjacent to the most favourable facade.

In the living unit at the left bottom side in Fig. 3 an inner staircase 9 is illustrated leading to a further living unit positioned on top of said mentioned living unit, which further living unit is illustrated in Fig. 4. It is also possible to install an inner staircase leading to a lower living unit.

In Fig. 4 the living units are shown, which are positioned on top of the living units illustrated in Fig. 3, the living unit, to which the staircase 9 is leading, only consisting of the core unit as 20 a result of a special roof construction 10.

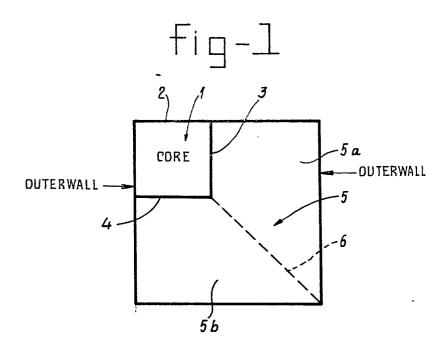
Furthermore in the corner unit of Fig. 4 is illustrated that it is possible to divide such a living unit in two sections by means of a separating wall 16, which extends along the imaginary line 6 in Fig. 1.

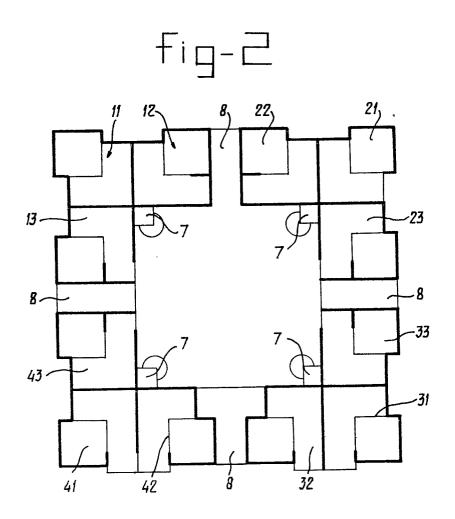
A parking garage, extending over the total rectangular annular shaped ground plan as illustrated in Fig. 2, can form the lower most floor or basement of the building.

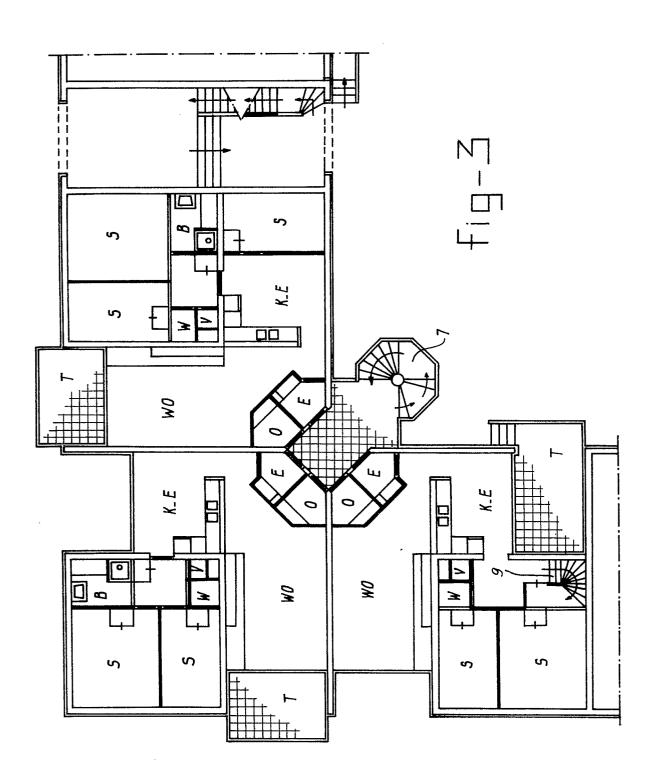
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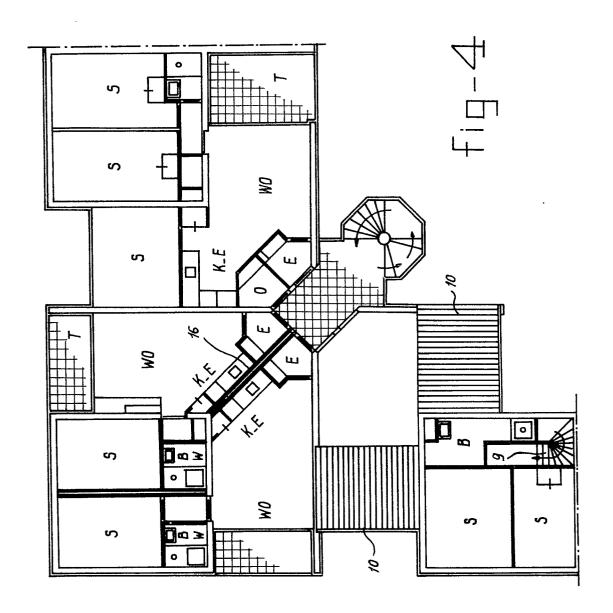
- 1. Building comprising one or more united living units, characterized in that, each living unit comprises, viewed in ground plane, a core which is substantially completely enclosed by walls and can be circumscribed by a rectangle of which one side is completely positioned in a facade of the living unit and of which the opposed side together with one of the adjoining sides are at least for the most part positioned inside said living unit, which living unit furthermore comprises a space enclosing said core as far as said last mentioned two sides of said core are positioned inside said living unit, which space is bounded by a wall disposed in facade and by a wall disposed in the opposed facade, in which space the entrance to said living unit is situated and which space furthermore is divided into two substantially equally shaped sections by means of an imaginary line forming the extension of the inwardly directed diagonal line of said rectangle.
- Building structure according to claim 1, <u>characterized in that</u>, three living units includes a right corner, so that said imaginary lines of the three living units are meeting at the angular
 point of said corner and the entrances to said living units are positioned near said angular point.
 - 3. Building structure according to claim 1 or 2, <u>characterized</u> in that one or more of the living units are divided into two sections by means of a partition wall extending along said imaginary line.
- 4. Building structure according to claim 2 or 3, charactered in that, a number of units are combined into a annular configuration surrounding a rectangular space, in each of the corners of said annular configuration three units including a right angle.
- 5. Building structure according to claim 4, characterized in

 30 that, a number of units, combined into a annular configuration surrounding a rectangular space, are positioned on top of each other, at
 least at each angular point of said rectangular space an up/down passage way is defined.
- 6. Building structure according to claim 4 or 5, characterized 35 in that, the lowermost ring of units is placed on top of the overall space bounded by said rectangular annular configuration.









EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT				CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)	
Category	Citation of document with indic passages	ation, where appropriate, of relevant	Relevant to claim		
	NL - A - 67 071 * Page 5, line lines 1-6; f	94 (DE VRIES) s 18-37; page 6, igures 2,6,7,8,9 *	1	E 04 H 1/02	
	FR - A - 2 391 * Page 2, line lines 1-15;	s 16-40; page 3,	1		
		Staf Right			
	<u>CH - A - 475 45</u>		1,3	TECHNICAL FIELDS SEARCHED (Int. Cl.3)	
		nes 9-40; column 3, figures 3,4,5 *		E 04 H E 04 B	
		8 (MUHLEMANN) mn 1, lines 1-24; nes 1-9; figures	1,3		
A	FR - A - 2 148 * Page 4, line lines 1-22;	s 8-40; page 5,	1,3		
		fore total		CATEGORY OF CITED DOCUMENTS	
A	FR - A - 2 426 * Page 8, line figure 11 *		2	X: particularly relevant A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlyin	
and the second s		Current Code Code		the invention E: conflicting application D: document cited in the application L: citation for other reasons	
X	The present search report has been drawn up for all claims			&: member of the same patent family, corresponding document	
Place of se	arch The Hague	Date of completion of the search 02-11-1981	Examiner	SCHOLS	