METHOD FOR QUICKLY DEVELOPING AN ARCHITECTURAL PROJECT BY MEANS OF DIAGRAMS

PATENTED TECHNOLOGY

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ABSTRACT

The group of trial, simulation and modeling of structures (GRESMES) has drafted a method for developing an architectural project by means of Voronoi diagrams, which allows to quickly obtain different distribution possibilities of the uses in the space.

The group is looking for companies interested in acquiring this technology for commercial exploitation.

ADVANTAGES AND INNOVATIVE ASPECTS

The procedure described in this patent has the great advantage of speeding up the entire process of developing an architectural project, since:

- It allows to develop singular variants of the same architectural typology at high speed, to allow the evaluation by the architect and its later modification with great agility.
- It allows the participation and direct involvement of the client in the decisions by being able to see the result instantaneously, practically in real time.

In addition, it will be a totally unique project for the client because it will be the result of a diagram consisting of a combination of numbers provided by the client. Therefore, a very strong emotional link will be generated between the design developed and the client.

On the other hand, this procedure can be applied both in dwellings on a flat surface and those on a slope, of a single height or buildings of up to 5 floors, of new construction or dwelling refurbishment as well as any type of conventional construction material can be used. All this without increasing the final price of the house.

INNOVATIVE ASPECTS OF TECHNOLOGY

The main innovation lies in the use of an automatic method that greatly speeds up the development of an architectural project.

In addition, the procedure is simple, during a two-hour conversation between architect and client/s the application shows, in real time, how the geometry of the project is born, grows, and is modified and evolves until it is finished. During this conversation the client is asked a multitude of questions, some related to the program, others about their way of living and other questions about more personal data of those who, in a few months, will occupy their home. From the answers to these last questions a series of numbers are extracted that will define the geometry of the perimeter and the interior division of spaces of the dwelling.

MARKET APPLICATIONS

This new method could be applied perfectly within the Construction and Architecture field (development and construction companies), as well as in companies of industrialized processes of the construction since it is possible to build the house in a workshop and then to move it to the parcel in question.

Therefore, those national or international companies dedicated to the **construction of modular housing,** currently a booming sector, could be particularly interested.

COLLABORATION SOUGHT

The research group is looking for companies interested in acquiring this technology for **commercial exploitation** through patent licensing agreements.