

Nature inspired in interior design -an experimental study on the design of the reception area interiors of a Nile River Yacht

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Abstract:

Appearance in interior designs inspired by nature is ought to be planned to ensure that functional and aesthetic factors are formed to go with architectural composition, The natural environment encompasses all living and non-living things occurring naturally on Earth or some region therefore. The problem of the current study lies in how to employ some of the nature items as a modern application in the interior design items, especially on designing for the yachts' reception area and welcoming entrances because First impressions are the most important part of the human interaction, so the reception can be an important element of the yachts which give visitors positive feelings and impressions as they enter for the first time from the relation reflection between yacht and its environment.

The study aims to clarify and explain the relation between nature and design with consideration of inspiring from the different items of nature by analyzing a selection of interior design inspired by nature as an important source for design and processors in contemporary designs

Keywords:

*Inspiration
nature
interior design*

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Introduction:

The appearance in interior designs which is inspired by nature must be carefully planned to ensure these contributions as functional and aesthetic ,most of them are formed with architectural composition, The natural environment encompasses all living and non-living things occurring naturally on Earth or some region therefore . It is the environment that encompasses the interaction of all living species. Climate, weather, and natural resources that affect human survival and economic activity the concept of the natural environment can be distinguished by components:

Complete ecological units that function as natural systems without massive civilized human intervention, including all vegetation, microorganisms, soil, rocks, atmosphere, and natural phenomena that occur within their boundaries

Universal natural resources and physical phenomena that lack clear-cut boundaries, such as air, water, and climate, as well as energy, radiation, electric charge, and magnetism, not originating from civilized human activity

In contrast to the natural environment is the built environment. In such areas where man has fundamentally transformed landscapes such as urban settings and agricultural land conversion, the natural environment is greatly modified and

diminished, with a much more simplified human environment largely replacing it.

Nature designs in the place formed from a variety of nature items they may be elements of plant or animal or parts of the human body..... Etc it should appropriate for the environment it originates them and some of the designs are strange, unusual and may not achieve the functional values

The design phase of inspiration begins by a designer to solve design problems which are given to the elements of nature resulted in mental stimulation or a sense of what produces the idea of a creative turn to the stage configuration and innovation by bringing together elements of the environment and put them in a specific configuration to give everything has a function or a meaning and free forms from the traditional structures

Interior design from nature takes into account when distributing values functional core of the freedom of the movement and takes into account the balance of color and the distribution will be consistent and coherent element of interior design ... etc

Also using the material in new application like design with Acrylic Sheets meet the basic needs in these types of design because they are unaffected by moisture, and offer a high strength-to-weight ratio, and high light transmittance also the sheets

can be easily heat-formed without loss of optical clarity Prolonged exposure to moisture, or even total immersion in water, does not significantly affect the mechanical or optical properties of this outstanding material so the process technique was more important in fact

Not only acrylic there are also many important materials used in these type of designs like stainless sheets and secure glass which is designed on with patterns from nature on it to link it with the around environment

And the research will address analytical descriptive study for one of the yachts and the stages of construction and implementation to the final delivery of the yacht

Research Problem:

- The problem lies in how to employ some of the nature items as a modern application in the interior design items, especially on designing for the yachts' reception area and welcoming entrances because First impressions are the most important part of the human interaction, so the reception can be an important element of the yachts which give visitors positive feelings and impressions as they enter for the first time from the relation reflection between yacht and its environment
- The shortage of knowledge about the requirements for the process of finishing yachts in the river Nile which is different to sea's yachts in using the materials with these new applications and methods of formulation the of spatial content and requirements to achieve the aesthetic and functional aspects

Objectives:

The research aims to clarify and explain

The relation between nature and design with consideration of inspiring from the different items of nature by analyzing a selection of interior design inspired by nature as an important source for design and processors in

contemporary designs

The basic features to interior design for the reception area in yachts and apply the study on the reception area in Cupid yacht in the river Nile

Methodology:

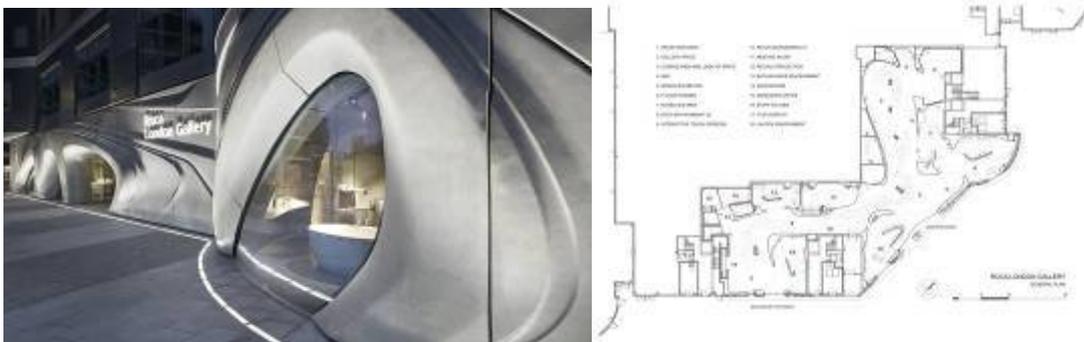
The study uses the analytical descriptive methodology

The analytical descriptive methodology in clarifying and explaining the relation between nature and design by analyzing a selection of interior design inspired by nature in contemporary designs

And has concentrated on the interior design inspired from nature as a modern application for the interior design construct

1 Analytical study for some selections of interior design which is inspired by the natural elements:

The elements inspired from nature such as plants, animals or parts of man's body related to the functional utility of the building they contribute heavily to the design process, it can apply aesthetic considerations to buildings and related architectural structures so they put into their consideration the best distributive way to get the basic functional values from the free movement, mobility and the design balance. The distribution should be more compatible and associated to the interior design and furniture because it is an important factor in turn reflect on the final output to work both in interior design or furniture and all those things have an influential role on the competitive challenges of the designer and is the value that leads to the quality of design all these have an effect on the quality and durability of the design and its effects on development as a condition for the improvement of living standards It is based on any of the following trends categorized by potential sources of inspiration or some of them:



Picture 1, 2 inspired designs from nature elements in Roca London Gallery and the plan for the project its lines inspired designs from nature elements

1-1 Compositional Construction in Design and the Shapes

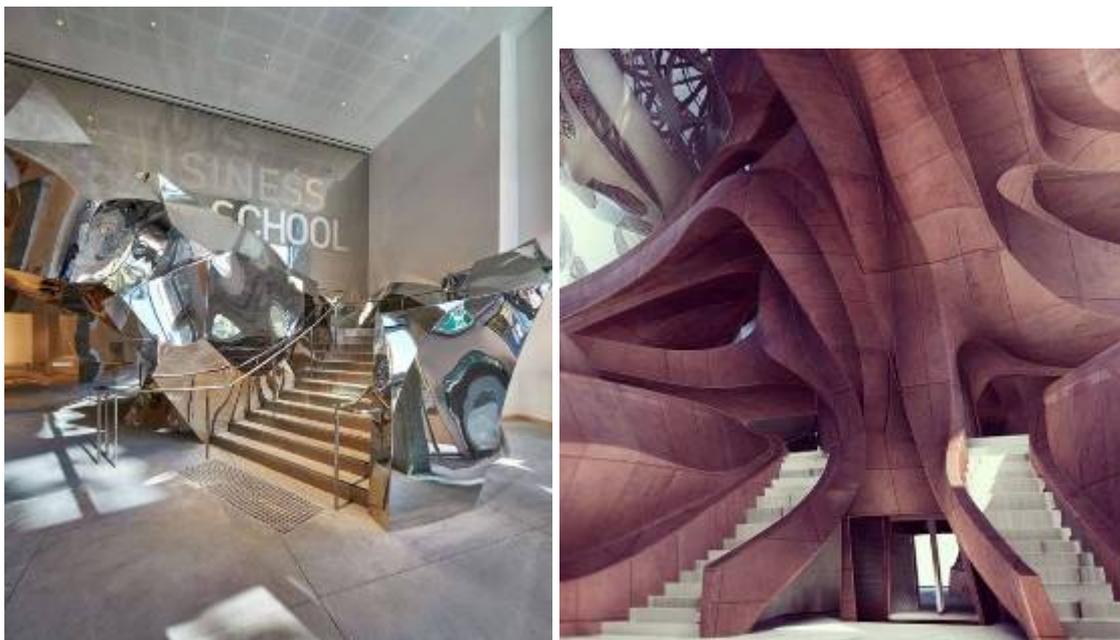
The inspired designs from nature take the ideas to the next level to create a cohesive project, and

establish a functional space that promotes productivity and profitability so that Being the formulation of the design by dealing with any human being; regardless of age, size and diverse needs and taking into account the economic aspects

also it must be based the design on the basis of the criteria and methodology help to solve the problems and create something new or convert at least cases the desire for



Picture 3, 4 inspired designs from nature elements in employee area designs



Picture 5, 6 different stairs design inspired from nature



Picture 7, 8 inspired designs from nature elements in court area



Picture 9, 10 inspired designs from nature elements in dining areas and cafe



Picture 11, 12 inspired designs from nature elements in reception areas



Picture 13, 14 Michael Hellgren designed AstraZeneca's office in Sweden with the purpose to bring more plants indoors and thus creating a more nature-friendly and inspiring environment at the workplace

A better state by solving the problems of the beginning of the configuration phase and innovation by bringing together elements of the environment and put them in a certain formation to give something to him the meaning and takes into account the distribution of values functional core of freedom of movement and color balance, and the distribution be consistent and coherent... etc.

like eco-tourism designs , which is one of the most developed and widespread concepts in the world they rely on picturesque scenery of natural resources like the yachts trips which are described as comfort with thrills and enjoying the atmosphere of sailing boat but with luxury and full

control the feeling will be amazing as the boat cut through the waves at high speed with perfect stability which means that the progress of the economics depend on the designs and it will affect on the tourism industry which has a dual relationship with the environment in the extent of efficiency in the use of resources and the resulting effects on the environment and how it gives a safe and healthy promote environmental stewardship and sustainable conservation of natural and environmental conditions and urban environments

1-2 The Dynamic motion of objects

The processes of education and experience provide a high level of quality assurance in the Dynamic

motion of objects which affect the sense of comfort inside the place on the state of the individual and increase the degrees of preference with the increase in the rates of achieving the

requirements and vice versa it is a positive relationship in spite of the concept of quality which differs depending on the time and place



Picture 15, 16 the dynamic motion of objects



Picture 17, 18 inspiring environment in ceiling and in the hall construction

1-3 Texture and colors of the natural elements

Colors must take into account the rights and the environment, temperature and preference to use the colors of nature and neutral colors to most

surfaces which give the place a sense of widens so the environmental efficiency and physiological comfort , a range of conditions to feel comfortable within the human climates and different factors



Picture 19 inspired by nature and incorporates its leafy surroundings into living spaces

Picture 20 inspired from octopus in lines and lighting



Picture 21, 22 Zaha Hadid characterizes her architecture as expressing a sense of motion. It is concerned with composing intersecting paths she attributes her inspiration to landscape, topography, sediment logy and geological patterns



Picture 23, 24 inspired Texture and colors of the natural elements in architect forms using material suitable for these application



Picture 25 inspired Texture and colors of the natural elements in architect forms using material suitable for this application

2 Experimental study on the interior design inspired from nature as a modern application for the interior design construct

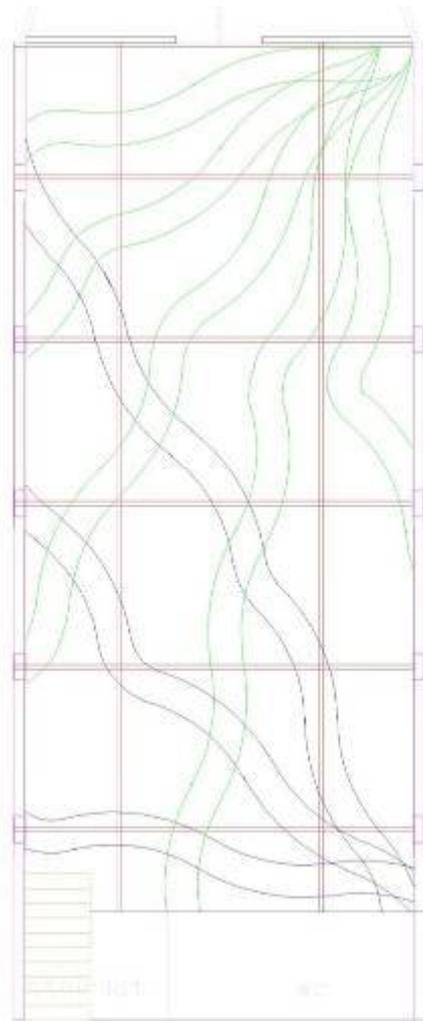
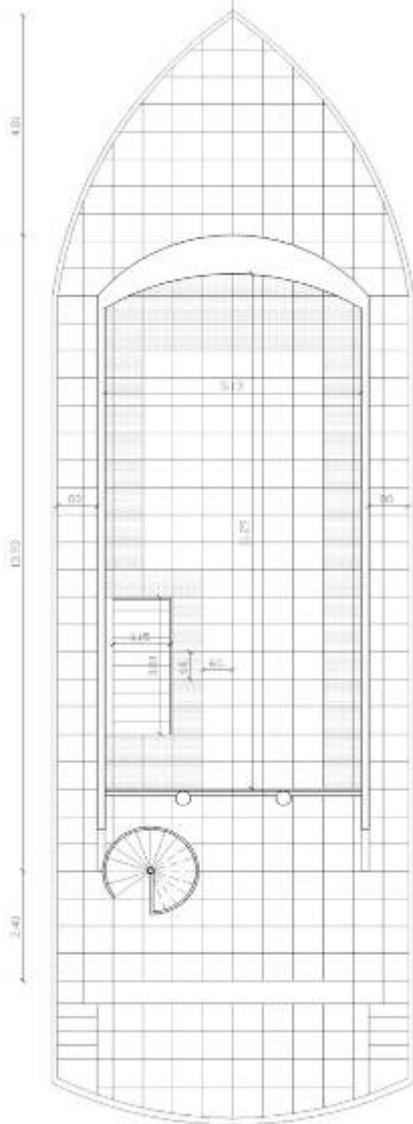
Experimental study dealt with how to inspire from nature as Nile waves in the design of the reception area in the first level of the Cupid yacht in the Nile

River and the implementation steps through the next points

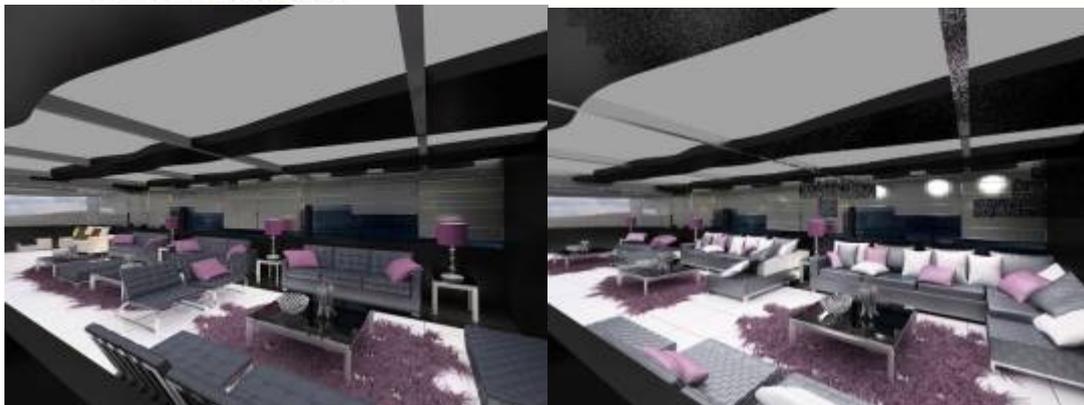
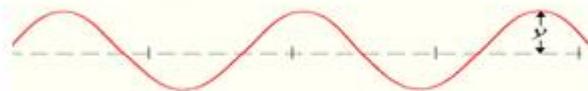
2-1 The Designing Phase:

The ceiling design was inspired from the Nile

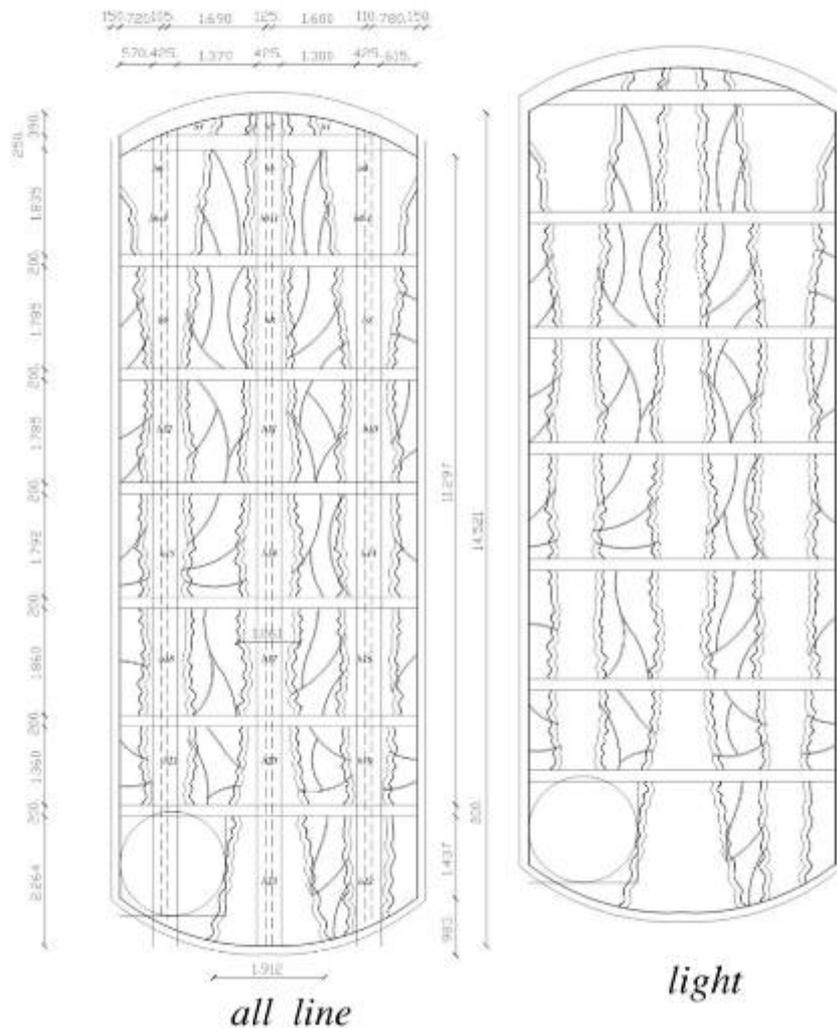
waves and made from acrylic Sheets which were well adaptive with the design requirements in curved lines and measurements module



Shape 1 Cupid yacht plan
Shape 2 trials in ceiling form
inspired from nature from Nile waves and shadow lights on it



Picture 26 for the 3DS max trials for interior design in the reception area



Shape 8 Acrylic tiles in ceiling of the cupid yacht all Tiles parts and how we compress them in sheets to reduce cost

2-2 the step of choosing colors and materials:

The ceiling design which was inspired from the Nile waves made from stainless and acrylic Sheets which met the basic needs because it is unaffected by moisture, and offers a high strength-to-weight ratio, and high light transmittance also sheets can

are white and black and all the construction lines be easily heat-formed without loss of optical clarity Prolonged exposure to moisture, or even total immersion in water, does not significantly affect the mechanical or optical properties of this outstanding material so the process technique was more important in fact which was well adaptive with the design requirements



Picture 27 Acrylic Sheet thickness and color

2-3 The Implementation

The implementation of design was started with fixing a iron structure on the ceiling according to the measurements of the Acrylic sheets 122*244

and thickness 6 mm and the ceiling height is 10 cm for the Acrylic tiles and 5 cm the iron structure where the electric wire will be fixed and 20 cm for the stainless sheets



Picture 28 implementation of design were started with fixing a iron structure

The designs width and length must be divided into pieces to be suitable to the sheets dimension so they will be subject to change and amendment

later to conduct maintenance work needed also to be easy for the entry of the yacht's door and then assembled and for transport



Picture 29 Acrylic tiles in ceiling of the cupid yacht all are white and black

2-4 The final design

After the iron structure was fixed we put Acrylic sheets and stainless separators according to the

design color and we use stainless nails to fix Acrylic

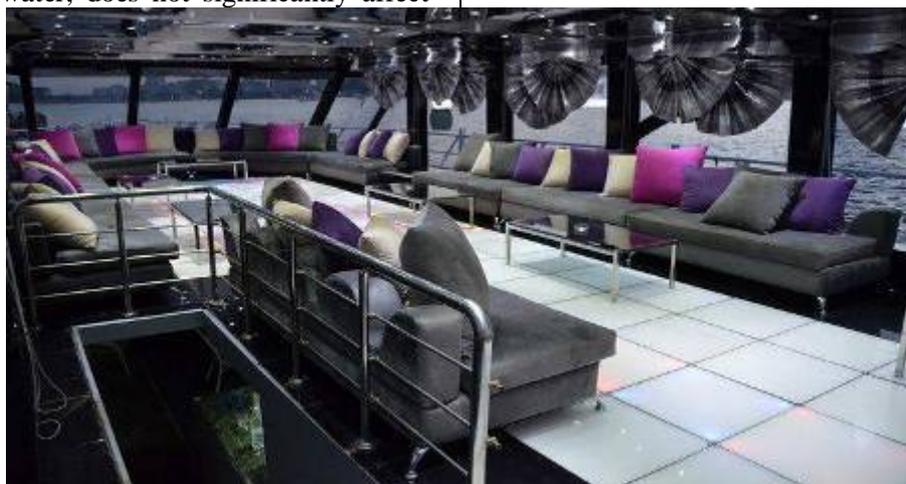


Picture 30 final design in reception area in Cupid yacht

The design with Acrylic Sheets was achieving the basic needs because it is unaffected by moisture, and offers a high strength-to-weight ratio, and high light transmittance also sheets can be easily heat-formed without loss of optical clarity Prolonged exposure to moisture, or even total immersion in water, does not significantly affect

the mechanical or optical properties of this outstanding material so the process technique was more important in fact

The guests feel that the place is bigger because the reflection of the sheets likes a mirror especially in dark colors



Picture31 the reception design in Cupid yacht in the Nile River



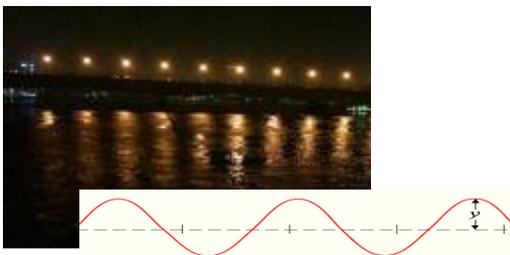
Picture 32 another photo for the reception design in Cupid yacht in the Nile River



Picture 33 the ceiling cladding and curtains in the yacht



Picture 34 the ceiling cladding with acrylic and stainless steel



Picture 35 the ceiling design is inspired from the waves of the river Nile and the light effects on it

The ability to make a secure glass sliding door and design a pattern from nature on it which links it with the around environment and we should provide a break from the rubber to reduce shock and friction resulting in cracking door leaf it also has to be put in the ground bumper for not sliding during the leaning of the yacht as a result of the movement of the waves.



Picture 36 the main entrance is a glass door and its design inspired from the waves of the river Nile



Picture 37 side of the phase of implementations



Picture 38 provided a break using rubber to reduce shock and friction resulting in cracking door leaf

Results:

1. Start the innovation process from understanding and simulation of natural systems and the application of knowledge in the new design processes that determine how to be adapted and evolved.
2. Nature is an important source of inspiration for the interior design which is linked to the surrounding environment specially in yachts to create a competitive advantage to achieve economic aspects
3. We need more of nature designs because the future will be belonged to nature which will be smart as far as technological development is required
4. The designs width and length must be divided into pieces to be suitable to the sheets dimension so they will be subject to change and amendment later to conduct maintenance work needed also to be easy for the entry of the yacht's door and then assembled and for transport
5. The guests in yacht feel the place is bigger because of the reflection of the sheets like a mirror specially in dark colors also it reflects the nature around the yacht
6. Dividing the design into pieces gives the chance to be adjustable and the change in height when placed for the first time to be balanced and on one level also it is suitable for making the inspired design from nature in the different forms
7. The ability to design on the secure glass patterns from nature which are linked with the around environment are used in the sliding doors for example...
8. Sliding door has to be ended with a brake

frame made of rubber to reduce shock and friction resulting from cracking door leaf it also has to be put in the ground bumper for not sliding during the leaning of the yacht as a result of the movement of the waves.

Recommendations:

1. Paying attention to the design inspired by nature to strengthen the competitive advantage and achieve economic aspects
2. Converting the results to applications by supporting research and development in this field and to ensure the development of skills, tools and methodologies which are needed to get inspiration from nature

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