## The role of industrial design and engineering design as approaches to the product design. Assist. Prof. Dr. Diaa Eldeen Abdeldayem Omar Department of Ceramics, Faculty of Applied Arts, Helwan University. <u>diaadaoud@yahoo.com</u> Assist. Lect. Sandy Badr Ragheb Department of Ceramics, Faculty of Applied Arts, Helwan University. Sandy.badr@hotmail.com

## **Abstract:**

The product design contains two types of design, engineering design responsible for the interior parts and their result in drawings and prototypes.

industrial design, it is responsible for designing the external appearance of the product.

based on the different tasks of both types of design, here when it comes the design approach Inside-Out, which means designing the product from inside first and outside-in approach.

Which means designing the external appearance of the product that first, then the interior design most of the products are designed with an entrance from the inside to the outside approach, but recently some companies have shown that It proved that the use of an approach from the inside of the interior can achieve to commercial success, which supports the idea that the design approach has a close relationship to the type of the product, and that the space for the emergence of an approach from the outside to the interior is due to the tremendous development of current technology that led to the emergence of more creative products on Aesthetic and functional aspects which it contributed to the liberation of the design process and product innovation.

However, I find that the designer has a close relationship with the types of products and this region requires a classification despite the existence of many classifications, but a few of them tried to discover this factor, that is, the design approach and the extent of its impact on the features and characteristics of the product and its development.

## **Keywords:**

Industrial Design, Engineering Design, Product Design