

Technology market “RESEARCH TO BUSINESS”

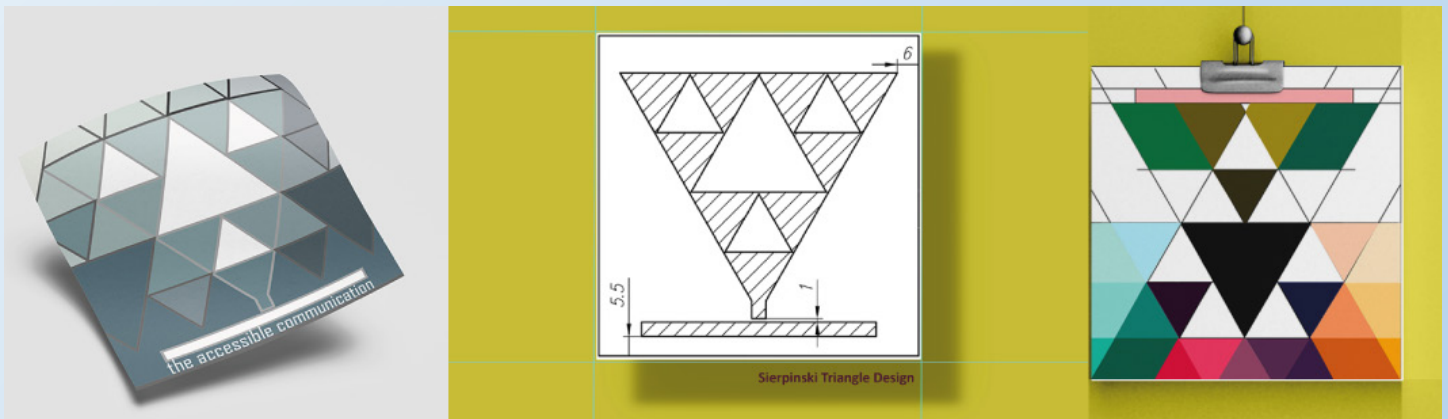
Offer № 012UM

Plannar antenna for information visualization

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The utility model relates to a planar antenna intended for the transmission and/or reception of radio waves for the purpose of communication by means of wireless communication technologies, implemented as a planar structure enabling its incorporation into various printed objects from the field of advertising and design aimed at visualization of information.

Application № 5185



State of the art

Already known solutions of antennas include: 1. multiple spatially oriented structures, realized with electrically conductive elements that form letters, symbols and/or other visual images - a complex technological procedure, no suitable output of the antenna power point, thus its operation is mainly limited to connection to an integrated communication module in the form of a microchip; 2. two planar parasitic dipoles, realized with a dielectric substrate, and on the other side - a planar active emitting element - the nature of the antenna does not allow easy printing, the cost of the final product is high.

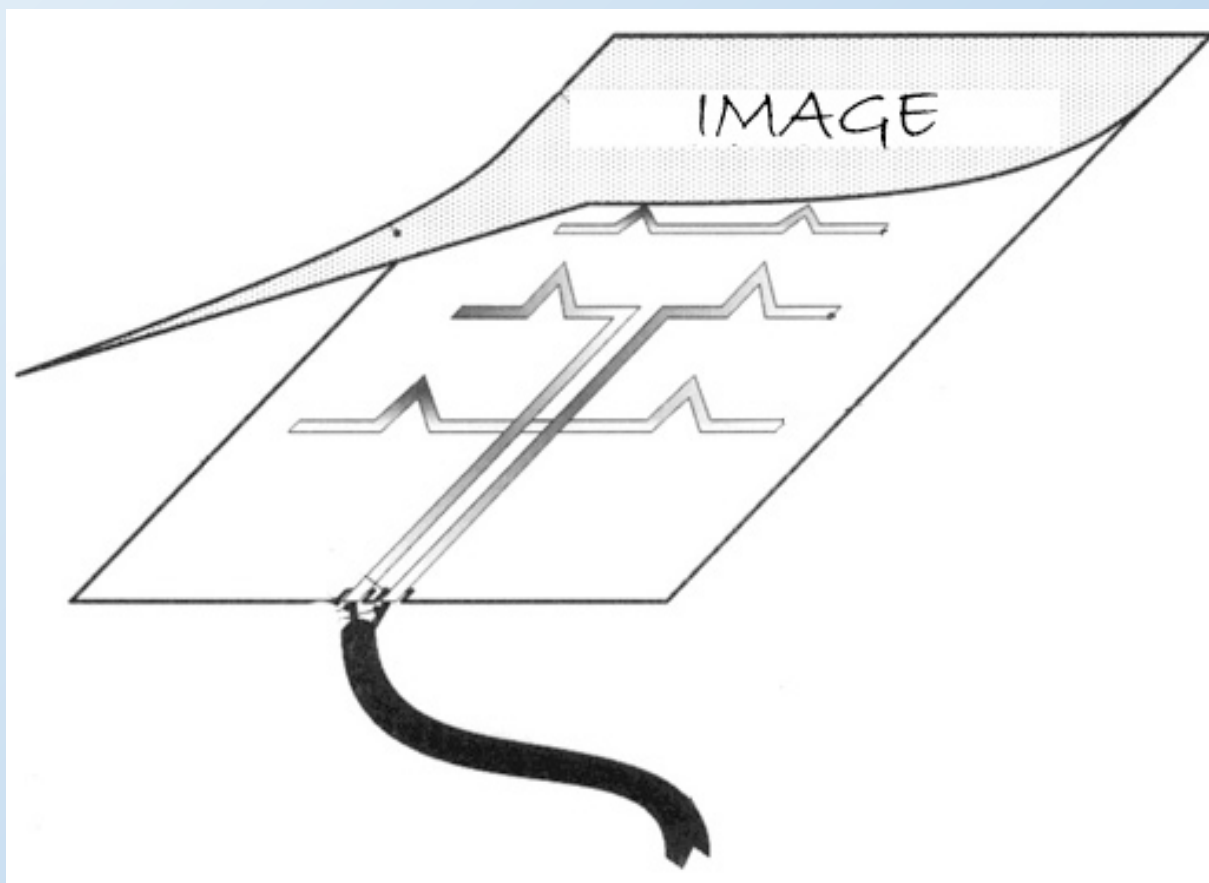
Technical solution

The planar antenna for information visualization, invented at TU – Sofia, consists of two insulating layers glued together and between them there are embedded conducting elements formed from electrically conductive foil in the form of a fractal configuration. The planar antenna system is characterized by the fact that text and graphic images are intended to be applied on the upper insulating layer, and on the lower insulating layer there are separate contact areas, where a high-frequency cable is connected with the help of a detachable or non-detachable electrical connection.

Application and advantages

Essential advantages of the planar antenna for information visualization: 1. On the front paper and/or polymer layer images are intended to be applied, using digital printing or other printing technology; 2. It is possible to achieve a detachable connection of the high-frequency cable and the antenna system, allowing the easy replacement of the planar antenna system; 3. The optimal parameters of the planar antenna system from an electrodynamic point of view are achieved by shaping its current-carrying elements in the form of a fractal configuration; 4. The cost of the product is low, achieved through the use of conventional materials and technologies for digital printing or other image transfer technologies.

Technological images



Contact for this offer



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