



⚙️ **Title**
BEAMFORMING COMPACT RADIANT SYSTEM

⚙️ **Inventor/s - Contact**
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⚙️ **Patent/ Application number**
Patent application OSIM: A/00082/18.02.2020

⚙️ **Short presentation**
The invention describes a compact radiant system with beamforming capabilities. The radiant system, according to the invention, comprises a 1:16 combiner / splitter, a switching / phase shifting block and a radiant element block. The radiant element block comprises eight identical panel antennas, whose reflecting panels form a regular octagonal prism structure, each panel antenna including two open dipoles. The radiation pattern of the radiant system can be modified horizontally to obtain a radiation pattern with a circular symmetry or one that favors a certain direction. The system is controlled digitally, without the need for mechanical modifications of the system.

⚙️ **Applicability**
Radio transmissions, cellular communications, terrestrial wireless communications, radio spectrum surveillance, radio detection, direction finding, target location (RADAR)

⚙️ **Images**

