



Title

ELECTRONIC MICRO-INVERTER FOR ENERGY CONVERSION FROM PHOTOVOLTAIC PANELS



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Short presentation

The invention relates to an electronic microinverter structure, composed of a boost converter and a conversion stage from DC to AC, intended for electrical energy harvesting from renewable energy sources, such as the photovoltaic panels and its injection into the local or public alternating voltage grids. The electronic microinverter according to the invention uses a reduced string of photovoltaic panels with a maximum power tracking system, thus reducing losses due to partial shading, respectively by increasing the conversion efficiency from direct voltage to alternating voltage by using a three-level voltage converter and a half-bridge inverter.

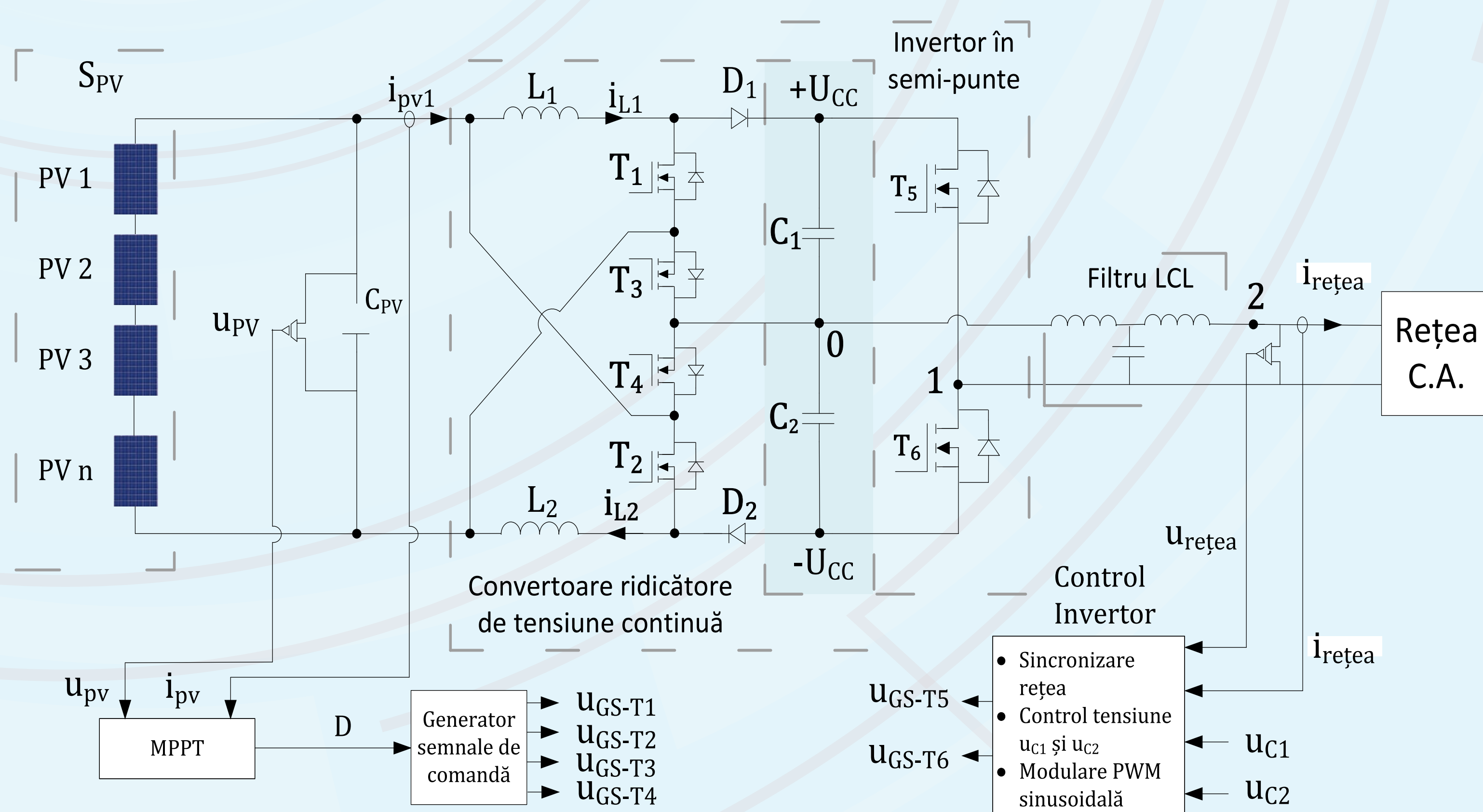


Applicability

Electrical energy harvesting from renewable energy sources by using photovoltaic panels and its injection into the local or public AC grids.



Images



Electronic schematic of the micro-inverter