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The invention relates to the field of electrochemical metal working, intensified by laser radiation, in particular to a process for dimensional laser electrochemical working of metals and a device for its realization, and can be used in various fields of industry in piercing holes, cavities.
The process, according to the invention, comprises synchronization of process current pulses and laser radiation pulses on the surface of the workpiece using the separation of the laser beam into two beams, one of which irradiates the surface of the workpiece, and the second - the non-functional surface of a tool electrode.
The tool electrode, according to the invention, comprises a body with a working part, focusing lenses and a non-functional part, made of semiconductor material and installed with the possibility of its irradiation with pulsed laser radiation. The semiconductor material is equipped with two outputs, one of which is connected to a power supply, and the other - to the surface of the workpiece.

Claims: 3
Fig.: 2