The invention relates to the field of electrochemical working and may be applied in the mechanical engineering, namely in aeroengineering, instrument-making industry, galvanoplastics and galvanostegy.

The process consists in that it is carried out irradiation of the worked zone with a laser beam by focusing the pulse electromagnetic irradiation by turns on the surface of the work part and in the electrolyte layer at a distance of 0,05... 4 mm from the surface. The subsequent focusing of the electromagnetic irradiation may be carried out by means of vibration of the optical system, synchronized with the light pulse repetition frequency. The irradiation may be carried out by means of at least two laser beams, the wave lengths of which correspond to the electrolyte transparency and absorption spectral zones.

Claims: 3 Fig.: 6