The invention relates to the field of dimensional electrochemical working, in particular to a tool electrode and to a process for holes electrochemical broaching and may be used in the mechanical engineering.
The tool electrode includes a working portion (11) of soft magnetic material, representing a hollow sphere with holes (12), onto its outside there are made insulation spikes (17), inside the working portion there is installed a mobile screen (15) in the form of hemisphere with the possibility of displacement, onto the screen (15) being fixed a magnet (14) with a central hole, the working portion is connected to the cathode through an electric conductor, and by means of a branch pipe to a flexible tube (13) for electrolyte removal.
The ratio between the diameter of the hole in the magnet about the diameter of holes on the working face constitutes 1,0:1,0…2,5.
The process for hole electrochemical broaching consists in placing a part into a closed chamber, connection of the part to the positive pole of the current source, and of the tool electrode, shown in claim 1, to the negative pole, the electrolyte is delivered through the part channel to the working portion, and the used electrolyte is removed through the holes of the working portion, the central hole of the magnet and the flexible tube, at the same time the position of the mobile screen is changed with the help of a magnet, placed outside the chamber for obtaining the necessary trajectory of the channel.

Claims: 3
Fig.: 2