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The invention relates to plants for water purification, in particular to the photocatalytic ones.
The plant, according to the invention, includes a recirculation system consisting of a reservoir for polluted water (11), a tubular filter made of macroporous ceramic membrane (1) with photocatalyst, coupled with the reservoir (11) by means of a pump (6), a discharge pipe-line (12) and a pipe-line for recirculation (8) of the polluted water, equipped with manometer (9) and valve (10). At the same time, the filter is installed inside the quartz jacket (13), equipped with a pipe-line for outlet of the purified water (17) and low-voltage ultra-violet (14) and infra-red (15) lamps, alternately placed into a flexible gummed support (16) on the outside of the quartz jacket (13), and the membrane (1) is covered with a carbon-fibrous material (2) onto which there is deposited the photocatalyst and which is compacted with a steel arch (3).
As carbon-fibrous material (2) are used woven or unwoven carbonized materials, with a thickness of 3…8 mm and as photocatalyst is used the platinum electrochemically deposited onto its surface, in a layer of a thickness of 0,1…0,2 μm.

Claims: 2
Fig.: 1