Title (en)

ELECTROCHEMICAL PROCESS FOR PRODUCING BENZANTHRONES AND PLANAR POLYCYCLIC AROMATIC OXO COMPOUNDS

Publication

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Application

EP 82101587 A 19820302

Priority

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Abstract (en)

[origin: US4394227A] An electrochemical process for the preparation of benzanthrones and planar, polycyclic aromatic oxygen-containing compounds is described. The process is carried out in an acid medium in an electrolytic cell which is separated by a diaphragm into a cathode compartment and an anode compartment. In the cathode compartment, anthraquinone or an anthraquinone derivative is reduced electrolytically to oxanthrone and the latter is reacted with glycerol to give the corresponding benzanthrone. In the anode compartment, a transition metal ion is simultaneously converted electrolytically from a lower oxidation stage into the next higher oxidation stage. The metal ion of higher valency is then used in the anolyte as an oxidizing agent by means of which the corresponding oxygen-containing compounds are obtained, starting from planar, polycyclic aromatic compounds.

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